

THE
RELATION
OF A
JOURNEY
INTO
England and Holland,
In the Years, 1706, and 1707.
BY A
SAXON PHYSICIAN,

In a Letter to his Friend at *Dresden*,
wherein are contain'd many remarkable
Passages and curious Observations
in *Anatomy, Surgery, Physick,*
and *Philosophy.*

By CH. ED. Physician in Ordinary to the
King of Poland, Elector of Saxony, &c.

Translated from the Latin.

LONDON: Printed and Sold John Morphew, near
Stationers-Hall, 1711.

Ed. Ch. C. H. Emmet

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THE P R E F A C E.

THE following Sheets seem naturally to demand a Preface, the design of which is to lead the Reader insensibly into the meaning of the Author, or to steal upon his hasty Minutes; the whole Scope of the succeeding Subject, which perhaps otherwise he wou'd not afford himself leisure to look into. As the Reader will see by the Title Page, this is the Journey of a Foreigner into England and Holland, or rather more properly might have been call'd a Trip to those Places, from the cursory Remarks he has made thereon. But this may be converted into a good use, if we will but give our selves Liberty to reflect on some of our own Countrymen, who when they have gone Abroad have deliver'd to us much such Observations of Foreign Countries, as we find here made of our own: And therefore those sort of Men ought to judge candidly of this work, which was not Translated with a Design to discover the Curiosities, and other valuable Things we have in our own Country, and particularly in the vast Metropolis of London, to Men of Letters and Observation;

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but to let such know as well as others, what an Opinion Foreigners have of us, and how much they are surpriz'd when they see our Publick Buildings, Libraries and other Rarities, with the vast Bulk of this City, and the multitudes of its Inhabitants, which exceed the belief of all that have not yet been Eye-witnesses of them. Which may afford the Men of Travel and Reading this Reflection, that there is something at Home within their Ken every Day, that deserves their Admiration and Esteem, and that they ought not to despise what is in it self curious and valuable, because it neither came from Greece or Italy.

And this Author, whom we find by his Writings is a Physician, is not only pleas'd to Complement us in our Magnificent Buildings, Universities, and the like; but has given the Characters of several Gentlemen among us famous for Learning and Libraries, particularly those of his own Profession, among whom Dr. Sloan has not the last Place, neither is he wanting in his Commendation of Dr. Cyprianus, and several others of Note; which shows however that he was a Man industrious to propagate Knowledge, and especially that relating to his own Studies of Physick. It is upon this Account chiefly, I believe that this Book was publish'd by the Author, for here are a great many hints in Botomy and Anatomy, which he had pick'd up at Hamburgh, in England and Holland, but chiefly at Amsterdam; where his Ob-

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Observations from Dr. Ruysch and Mr. Joh. Jacob Raw make the greatest part of this Tract, besides his Acquaintance with all the other eminent Physicians and Surgeons in his Travels. Feb Remarks he has made from these diligent Observers of Nature, are both very Curious and New. For First, He takes Notice of Ruysch's Thesauraria or Repository of Anatomical Rarities, then gives us Mr. Raw's Opinion thereon, and proceeds to the Discoveries Mr. Ruysch communicated to him, as 1ly. The Ossicula, or little Bones of Hearing. 2ly. Of Dr. Highmore's Cave or Cavity, which is internally discover'd in the Sinus of each Maxillary Jaw. 3ly. Of the Urachus in a New-born Child. 4ly. Of the Paracentesis or opening of the Chest in an Empyema. 5ly. Of the Trepan. 6ly. The Dissection of a Woman with Child. 7ly. Of Abortions or Misearriages. And 8ly. Of Blood-letting.

Then again he gives a very handsome Character of Mr. Raw with an Account of the Discoveries he shew'd him, and several Operations he perform'd before him, as his Scholar. And 1st. He tells us of an excellent Discovery of the true Seat of the Articulation of the lower Jaw-bone, and the upper in a Sceleton. 2ly. Of the Foramina of the Skull. 3ly. Of the 11th Pair of Nerves wherein he accuses Dr. Bidloe, who was Physician here to King William, of the greatest Injustice, for attributing the Invention of this to him
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self, which was Galen's. I find all along our Author will not allow Bidloe that Fame and Merit he pretends to. 4ly. Of the Articulation of the Wrist in the Sceleton, together with the Radius and Ulna. 5ly. A great Curiosity concerning the Generation of the Teeth. 6ly. Of the Muscles. 7ly. A curious Discovery concerning the Clitoris, with the Vagina, Hymen, Nymphæ, and Carunculæ Myrtiformes. 8ly. The Circle of the Nipple of the Breast. 9ly. Of the Glands of the Head. 10ly. A Dispute of the Gland Thymus betwixt Dr. Bidloe of Leyden, and Dr. Phil. Verheyen of Louvain, both Professors of Anatomy in their several Universities. 11ly. Mr. Raw's Angyology or Description of the Vessels with their several Branches; 12ly. His Splagnology or Account of the Genital Vessels, wherein he compares the Vasa Defertoria, and Seminal Vesicles with the Hepatick Duct and Gall Bladder. 13ly. Observations for Midwives and Surgeons. 14ly. His Method of searching for the Stone. 15ly. Of Cutting for the Stone. 16ly. An Aperture of the Scrotum. 17ly. A Caries of the Shin-Bone. 18ly. Amputation of Members. 19ly. Taking off an Excressione of the Womb. 20. Of a Scirrhus and Cancer of the Breast, in which our Author arraigns Mr. Bidloe with want of Judgment. Then our Author gives an Account of Cologn, with some Thoughts of the Philosophers Stone, a Proof whereof he says he met with at Frankfort, and that the

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the common Reader might not think it depended solely on his Opinion, he brings us the Testimony of the Emperor Ferdinand out of Swelffer.

But that I may do our Author Justice, for the Honour and Esteem he expresses of Great Britain, give me leave to remind you, he says, he dare not attempt an Encomium of the Beauty and Ornaments of London, lest the Splendor of so August a City shou'd be diminish'd by so weak a Description as his might be. Then he proceeds to all the publick Buildings, as they occur'd to his Memory, and gives a particular Account of the Regalia in the Tower, which we have not in any Author of our own. After he has spoke with some Contempt of the Anatomical Preparations in Gresham Colledge, which he says are Trifling and of no Value, he mentions some of the most eminent Members thereof, with just regard to their Rarities, Libraries, Learning, and the like; and so having taken a view of London, not without saying of St. Pauls, that it is a wonderful Work, which will exceed the Temple at Ephesus, and whatever the Romans, or the Ingenuity of so many Ages, has produced before this; he proceeds to Oxford, where he is fill'd with a just Admiration and Regard for the Beauty, Literature, Curiosity and Magnificence of that Place; together with the Botanick Rarities in the Physick Garden, the School of natural History in the Musæum, and a wonderful Specimen of Modern Architecture in the Theatre. After this he Essays some Account of the State of Religion, and to speak something of our Sectarists at this Time in England, but being so much a Stranger to the Language and Customs, and so little acquainted with the Establish-
ment of the Church of England, he talks very oddly

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on this Subject, and only seems to repeat what such as had convers'd with him, had imposed upon him; but as he professes himself a Physician, I suppose his Divinity will make no great Impression upon his Readers, according to that saying, *Ubi tres Medici, ibi sunt duo Athei*, which I think is sufficient to say upon this Subject; tho' that Sentence is often ill apply'd to some Men, who Practise all the Christian Virtues, as Humility, Charity, Forgiveness, &c. and believe what is necessary to Salvation, yet their disagreeing in some indifferent Opinions with Men (who make their own Thoughts a Supream and infallible Standard for the rest of Mankind) even in Political Affairs, is enough to raise many infamous Denominations; but of all Writers, Travellers are the most excusable in their Relations, which are for the most part made up of particular Conversations, and consist more of what they see and hear, then what they think. Therefore they do not deserve such Mock-Journeys, and Transactions to be cast upon them. Sir Will. Temple's Essay of Health and long Life, hath paid great Honours to the Physicians, and compares them with other Professions, which are not without their Spots; and therefore seeing they study Nature and Things, which were before Words, and Tatling Rhetorick, they are upon a solid Foundation, and the Subject of their Thoughts, the Divine Creation, may last, when the Vanity and Affectation of false Eloquence are defunct, and the Stage of Buffoonry as low as Burges's Meeting-House.

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From my Childhood upwards, besides my Natural Genius and the Arts of my Family in which I was Born and Educated, I have always prosecuted the Study of *Libraries* and the Learning contained in them; Therefore towards the latter end of July, 1706. as you know my Friend, I undertook a Journey, and directed my way in the first place to *Lipstick*; in order to take leave of my Friends, from thence I went to *Guelphin*, where

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I was kindly received by Monsieur *Shomburg* General of the Duke of *Brunswick's* Forces, and was recommended to Mr. *Leitharding* the *Library Keeper* there, who immediately upon my Arrival shew'd me that *August Library*, the most Celebrated of all *Europe*. This was kept in the Dukes *Arsenal*, after the *Building* which formerly contained it was destroy'd, but now it is *Rebuilding* after a more *Magnificent* manner, in an *Oval Figure*, upon which I saw a vast Number of Workmen.

It is scarce *Fifty Years* ago since this Eminent *Archive* of Learning was founded; neither has it from that time, since which the Founder Died, been much Augmented, nor has that Collection of Books which Duke *Rudolphus Augustus* collected for private uses been added to this; for that Liberal Prince was pleased to bestow it upon the University of *Juliers*: But within these two Years this Library has been wonderfully encreas'd with the choicest and best Editions of Books Bought at the Publick Sales in *Holland*, by the Command and Bounty of the most Serene Prince Duke

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Duke *Anthony Ulrik*, which are all kept in particular Boxes or Shelves lock'd up and separated from the Old Library, which you may observe on your Right Hand as you enter in. What Diligence and Cost the First Founder was at beyond the rest we easily may make an Estimate, that from the Year 1625, in which the Foundation was first laid, to the Year 1666. the Number of Volumes throughout the whole was grown to near Fifty Thousand, among which there were about Two Thousand Greek, Latin, Hebrew and Arabick Manuscripts, &c. Afterwards there was a great addition made to this by the *Mazarine Library*, which contain'd the General Councils in Thirty Seven Volumes, neatly Bound and Gilt, with the Cardinals Ensigns of Honour. Neither was that a small Contribution which was made by the Diligence and Industry of Mr. *Wick fort*, sometime Envoy to the French King from the Duke of *Brunswick*, who bought Forty Manuscript Volumes at the Price of Twenty Four Thousand Crowns, and sent them from *France* to Duke *Augustus*: There are many

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secret Occurrences of those Two Great Ministers *Richlieu* and *Mazarine* in those Books, great part of which afterwards were Publish'd both in *France* and *Holland*, by the Writers of Lives, particularly by the Authors of the *Memoirs*: among the rest, the most Ancient that was Printed was a *Latin* Book entitled *Rationale Divinorum Officiorum*, or the Reasonableness of Divine Duties, Printed by *Faustus*, 1459. Of the Manuscripts most worthy Observation, the First is the *Bible* of *Jerom* in the Year 1315. by a Monstrous Brother called *Calf Sifridus*, whose Picture is Drawn in the Front of the Book with Calves Head, Hands and Feet; the next is *Boetius de Boot* of the Life of Plants, given to the Library by *Augustus Barraeus* Chief Physician to the French King. Here also may be seen the *Lubeck* *Bible*, Translated into the Ancient *Tutonick* or *Saxon* Language, and Printed in the Year 1494. the most Remarkable thing in it, is the Odious Gloss in the Margin put upon the Women in the Third Chapter of *Genesis*, on these Words, *Under Soll dein, hersehn,* &c. *dy vakene to pyneg hende un to* *slaende.*

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Placide. This Gloss is supposed to be a peice of Forgery, because the Latin Commentators say no such thing or take no notice of the matter. What is mention'd concerning the rest and are shewn in the Library, are found in the Domestick Materials of Blessed *Luther*, as our Author calls him, and in the *Breviary of Prayers* of Mr. *Amtri*, which is Entitl'd the *Garden of Paradise*, and was preserv'd from the Fire: The *Library Keeper* told me what had been commonly observ'd, occasion'd by a Tract of *St. Ignatius in his Epistles to the Philadelphians*, and was found in the Ninth Chapter upon that place of the Apostle *St. Paul to the Romans* concerning Marriage, wherein that Apostle is called in question, by his affirmation of these Words *Sicut Petrus & Paulus & reliqui Apostoli, qui Nuptiis operam dederunt*, &c. Like as Peter and Paul and the rest of the Apostles who were Married, &c. And though the Name of *Paul* is not to be found in the most received Impressions, yet I have been inform'd by a Friend of mine that he has seen an ancient Manuscript Copy in the Library at *Oxford*, in which the

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Name of Paul is still to be found, although it has been raz'd out with some care. I view'd the Library some Days together, before I visited the Dukes Castle, which lies adjacent to the *Equestrian College*, but it was a dismal spectacle to look upon the Ruins of the New Church, which was neatly Built according to the exactest Rules of Modern Architecture by the most Serene Duke for the use of the Soldiers. And that which exceeds almost all Belief, this Sacred Building was by Lightning, level'd with the Ground in a few Hours time, so that one Stone scarce remains upon another, and there are little Footsteps left of an Edifice so finely Built. This sad Accident happen'd about that time in which there was a Controversy betwixt the Duke and Mr. *Spectrum* about the Princess his Neice choosing her Religion, which she then declared for the *Roman Catholick*.

Leaving *Guelphin* I came to *Bruns-wick*, and in the midst of that Journey, I was agreeably Diverted with the Magnificent Palace and Gardens of Duke *Anthony Ulrick*, which is call'd *Calk Thal*. I shall say nothing of the

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the Gardens which are extraordinary Delightful, considering the short time since they were begun, 'tis sufficient to make mention of the Building although it be chiefly composed of Brick and Wood, and of Eighty Years standing, yet it is a Regular piece of Architecture, and for the Pleasantness of the Situation, may compare with any Palace or Gardens in *Germany*. This Building was Begun and Finish'd by a certain Joyner or Cabinet-Maker call'd *Herman Korb*, a Man whose Genius naturally led him to Mechanicks, and who was singularly esteem'd by a Duke of the same Name with the present. This *Herman Korb*, who from a Joyner became an Architect, show'd a peculiar Dexterity in this Compleat piece of Work, which has been had in Esteem by Foreigners both *French* and *Italians*, who with the Building have commended the Artificer, and allowed him a Place or Rank among the First and most Excellent Artists of this kind. As to what relates to the Pictures which are to be seen in the side of the Building, they were the Work of one *Lohm*, a Citizen of *Hamburg*, but the Serene House of

Brunswick and *Lunenburg* were Drawn to the Life by the celebrated Hand of *Boubell* a French Painter. In the middle of this Pallace is a spacious Hall, in form of a *Parallelogram*, not rais'd on Marble Pillars, and graced with stately Columns, but adorn'd with the sweetest Paintings. On both sides Ancient Statues made of Brabs are dispos'd in the most Beautiful Order, expressing the Effigies of *Homer*, *Plato*, *Demosthenes*, *Aristotle*, *Dionysius*, *Cicero*, *Seneca*, &c. Not to mention the rest, which are form'd of Alabaster, the most delicate of which is a representation of *Flora* lying on the Ground, which was brought out of *Greece*, and purchased by the Serene Duke at a Thousand Crowns. The other Spaces are supply'd by the Choicest Paintings of the Best Hands, among which are placed 25 Volumes the most curious Specimens of Architecture, Paintings and Botanick Knowledge, which I likewise saw in the Famous *Comelinus*'s Gardens at *Amsterdam*, where the Figures of the Plants are Painted with such nicety and exactness, they strike the Eye with great Pleasure in the Observation. In the Closets ar
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secret Rooms of this large Hall are kept several of the most Scarce and Valuable pieces of Painting, as *Mary and Joseph* done by *Michael Angelo*, a Picture valued at Fifteen Hundred Crowns. *The Saviour of the World*, by *Caraggio*, computed at Two Thousand Crowns. *Joseph* representing the Carpenter, by *Pietro Romano*, which Painting the most Powerful King of *Prussia* presented to this Court.

I remember in a secret Cabinet, that is not shown to every Body, amongst a vast number of Rarities from *China* and *Japan*, *Asiatick* and *Grecian* Antiquities, I saw an old Brass Plate near a Foot and a half high, which contained the Head of *Aristotle*, Chief of all the *Grecian* Philosophers, 'twas an exquisite piece of Work, and had this *Greek* Inscription upon it.

ΑΡΙΣΤΟΤΕΛΗΣ. Ο^Σ ΑΡΙΣΤΟΣ. ΤΟΝ
ΦΙΛΟΣΟΦΩΝ.

Which signifies, *Aristotle the Best* or *Chief of all the Philosophers*. I wonder at the Greek particle *Τον* in this

this Inscription, which is not altogether so agreeable to the Greek Grammar, but it might be put in through the Ignorance of the Engraver, therefore it ought not to lessen the Esteem we should have for the Antiquity of this Piece. I was likewise shown in this Repository of Antiquities, a Human Skull, nicely adorn'd with such Work as the *Pagans* used upon their Heads, which stood for Oracles to Answer such Questions as should be put to them, but I rather was of Opinion that this was made as a Drinking Cup for some Barbarous Conqueror. Concerning the other Closets of this Magnificent Palace, and their Furniture it would be too tedious to take notice of them, it is sufficient to the Curious to observe that this Building is worthy of a King, and the Beauty of the Gardens and Palace together are Inferior to none in Europe. But this I shall remarke before I leave this Place, here is a Chapel with a Choir, wherein a certain Number of Virgins, who are of the Equestrian Nobility, officiate at Divine Service after the Manner of the Protestants, and have a Liberal Maintenance

tenance allowed to support their Characters. What I saw at Brunswick is scarce worth mentioning, except the Cathedral Church, which is called from great Antiquity, *St. Blasius*: In the Choir I saw some Books writ in an Ancient Monkish Character, which those good Canonical Brethren at leisure Hours found out, and in which they used to Sing, as some would have it, their Diabolical Hymns. In the Castle which is not very Magnificent, but Built after a plain manner, according to the Ancient Rules of Gothick Architecture; among the Rarities are to be seen Two pieces of Painting, one representing a *Persian* Girl struck through with a transparent Dart, done in *Persia*, and brought to this Place perfect and entire; the other is a Picture done to the Life, of the Wife of *Philip the Fourth, King of Spain*, in her Royal Weeds.

From Brunswick, with some Merchants that had been at the Mart there, I came to *Hamburg*, where I was kindly received by a Kinsman of mine *Mr. Hiltken*, of whose Hospitality, together with that of his Loving Wife, I can never say too much: The Works

of

this Ingenious Gentleman, with what-
soever else was worth seeing in Ham-
burg, I had the opportunity of enjoy-
ing; for he had a particular Conver-
sation and Correspondence with all
the Men of Letters in that Place, and
a choice Library of Books of all kinds
of Polite Learning in his own House,
which he had carefully Collected in
his Travels almost throughout all
Germany, Holland, England, Denmark
and Sweden; I saw in this several
Scarce Books that were very Curious,
good part of which he had got in
the Year 1691, from that Private Li-
brary of *John Van Westreenen* at Leyden,
a Catalogue of which he keeps to this
Day, they are Books rarely to be met
with, and taken notice of by few
Historians, either *Greek* or *Latin*, con-
sisting of *Antiquities*, *Coins*, *Geography*,
&c. The said *John Van Westreenen*
was also very curious in his Life-time,
in enquiring after the Manners of the
Living of the *Greeks* and *Romans*, as
to their Pleasures both in Diet and
Venery; of which he has made a
Collection from Antient Monuments
and Writings, good part of which he
has publish'd, in all the Elegancy of

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the *Latin Tongue*, under the Name or Title of *Elogie Sigeræ*. After his Death a Treatise of the like Nature was found in his Cabinet or Scrutore, Writ with his own Hand, and Illustrated with Figures to the Life, much more Wicked than the former, in which he had represented all the Obscene Figures he could collect, and explain'd them in all the Beauty of the *Latin Tongue*, in which he was excellent, but Thanks be to God, this was never Publish'd; at the same Mr. Hilcken's I saw *Urbanus Hiarne*, Chief Physician to the King of Sweden, his *Prodromum*, or Natural History of Sweden, writ in *High Dutch*: This Treatise is known but to very few, for from the Author's Manuscript, it is Translated into the *Swedish* and *German Tongue*; he has Communicated it to some of his Friends abroad, but in Sweden it is distributed to every Province of the Countrey, by the King's Command. Since that the said Ingenious Author has promis'd a Specimen, but it is not yet extant, which all the most Curious Naturalists impatiently expect.

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The said Mr. *Hilcken* was then ver-
ry busie in the Edition of the Posthu-
mous Works of *Vincentius Placitus*, in
his detecting Anonymous Writers,
which were Collated with his own
Hand, with a Suppliment of Mr. Ma-
stricht, a Magistrate of *Bremen*, &c.
it was Publish'd by Mr. *Libernickel*,
Bookseller at Hamburg. The Editor
spar'd no pains in this Undertaking,
for he continu'd down the History,
of which *Vincentius Placitus* had made
the First Edition in 1678, to the Year,
1691. besides the labour of the Sheets
that were Transpos'd, and the alte-
ration of several Words that were
not expressive enough of the Meaning,
or too difficult to be understood.

But before I shall proceed to give
an account of what I saw in Publick, I
am oblig'd to take notice of Dr. *Luders*,
an excellent Practical Physician, who
in his curious Acquisitions has a par-
ticular regard to Minerals, of which
he has a notable Collection, among the
rest a Curiosity call'd *Cornu Ammonis*,
almost of the bigness of a Crown
Piece which comes from the *Pyrites*,
and Shines like Polish'd Brass, very
beautifully form'd by Nature, bright
and

and entire. I am much indebted to this Gentleman's Curtesie, who show'd me a *Museum* of Mr. *Petræus*, made up of the choicest and most curious Minerals; Dr. *Luders* likewise introduc'd me into Dr. *Biester's* House, a Famous Practitioner of *Hamburgh*, who was entirely compos'd of Good Manners and Affability: he formerly Practic'd in *London*, with such success, that in a short time he got a considerable Sum of Mony, and then return'd to *Hamburgh*. *In Conversation*, he told me of a new Method of Curing the *Gout*, which had prevail'd with a Countryman of *Hamburgh*; he used to wash his Feet daily in Urine, and at the same time apply'd Blistering Plaisters, and so by degrees he was freed from his usual Pains. A Bath for the Feet, or Lotion of *Cows Piss* has often prevail'd, and especially the Drinking of it in Spring Season, by which the whole Mass of Blood becomes Diluted and consequently Cleans'd, and this Practice he gain'd from *England*. There is another Eminent Practitioner in *Hamburgh* call'd Dr. *Kirchhoof*, who has a large Practice, and is very curious

tious in his Collection of Books. He shew'd me a very scarce and excellent Edition of *Cælius Aurelianus*, much commended by *Fabricius*, which he got at a Publick Auction of *Gudiana's* Library whilst I was there, the Title was, *Cebius Aurelianus*, an Ancient Physician of the Sect of the Methodist. His Treatise of Diseases and their Cures. Of Acute Diseases 3 Books. Of Chronick five, Corrected from the true Manuscript and Illustrated with Annotations, with a Copious Index; Printed at *Lyons*, by *William Rouille* at the *Venetian Arms*, 1569.

So much for Private Concerns, now I shall say something of the Publick Libraries of *Hamburgh*, as any thing worthy Notice shall ocurr, the Principal of these is that which is in the Church of *St. John*. The Library-Keeper was *Mr. Suerlander*, a very Ingenious and Civiliz'd Man to Strangers: Among the Number of Books in this Library, a good part consisted of Manuscripts, the most Valuable whereof he shew'd me, and are as follows:

D. Paula

D. Pauli Margii Schlegelii. *Herbarium Vivum.* Tamis seu comprehensum, in quo plantae omnes cum Cura singulari exsiccate, & explicatas a docta celeberrimi Auctoris manu cernuntur.

Or a Peice of Botany of Schlegelius, containing Six Tomes, in which all the Plants are dried with singular Care, and explained by a Learned and Eminent Author.

Chronicon Lubecense, ab Anno, 1106. ad Annum, 1430.

The Lubeck Chronology, or account of Time from the Year, 1106, to the Year, 1430.

Speculum Hermetis, cum Figuris, or *Hermes Looking-Glass,* with Cuts. There are many things in this Manuscript from *Fasimus*, who, frequently attests what is deliver'd of the rest, there are a vast Number of Figures and Magical Characters; in reading over and collecting out of this Manuscript Copy, there was abundance of Time and Labour bestow'd, by the Library Keeper *Bluhm*, who was *Schelhammer's* Predecessor, and laid violent Hands upon himself, for to the great Dishonour of the Place he Hang'd himself in the very Library.

Pfelli. Quest. & Solut. Physicæ, ad Imperatorem Michaelem Duc. Constantinopolitanum, Bonon, 1580.

Physical Questions and Answers to the Emperour Michael, &c. Printed at Bononia, 1580.

Fausti Libellus, quod nihil incorporeum in se sit Creaturis.

MS. B. 11. 17. The Book of *Faustus*, that there is nothing Incorporeal in the Creature.

Clandiani Mamerti, de Statu Animæ libri tres.

Clandianus Mamertus, of the State of the Soul.

This Book was Printed, but afterwards Corrected and Amended by the Hand of *Lindenbrogius*.

Some Physical things, among which are the Names of the Fish in the White River, in Latin and High-Dutch.

In Octavo.

Album Lindenbrogii, or Lindenbrogius of the White Matter of the Philosophers.

Scriptum

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Scriptum Magicum Germani Idiomatis. A Magical Writing in the German Language.

Capitolo di Giovanni della Casa Sopra il Forno. The Author of this Piece was the Archbishop of Beneventum, whose Latin Monuments, Orations and Epistles, from the singular Elegance of the Style, are held in such Esteem by all the Admirers of Latin, but only that this Poem was writ in Praise of Sodomy, and Address'd to John House, as the Title shows, who no doubt was a Lascivious Young Fellow.

In Duodecimo.

Abregé d' Alchimie. An Abridgment of Alchymy, the Author is Alphidius: He assigns Mercury to be the Subject Matter of the Stone, the whole Tract makes but Two Sheets.

Among the Natural Curiosities which are kept in this Library, there are an eminent Collection of Cockle-Shells, of these one more particularly Beautiful, and another Imbricated, which is very rare to be met withal. The Library Keeper likewise show'd

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me a *Mandrake-Root*, delicately form'd, with Hands turn'd backwards, a long Beard, with Teeth standing out of his Mouth, exactly resembling the Figure of an Old Man. There is another Library at *Hamburgh* belonging to the Canons, which is kept in the Cathedral Church. The Founder of this was Mr. *Goedersen*, sometime Dean of the Chapter; the Enlarger or Benefactor Mr. *Multr*. The Choicest Books of the Library are these, *Ptolomy's Geography*, neatly Printed on delicate Paper at *Ulm*, 1486, with Geographical Maps to Illustrate the whole. This Book was in the Library at *Prague*, before it was translated to *Hamburgh* by a Swedish Soldier.

A Manuscript, under the Title of *Addenda & Delenda*, or Additions and Amendments to *Thuanus History*, the thickness of a Finger, Guilt and Bound in Vellum; this Volume is done with the same Neatness and Beauty as that Manuscript from *Paris* which adorns the *Guelphin Library*, that I have mention'd before, and am almost perswaded it belongs to.

This

This Library has a Fund from the Canons Revenue; from which all New and Curious Books are Bought Yearly, the Newest of which the Library Keeper shew'd me, and it was entitled the *Mishna of Will. Sunrenhusius of Gronengen*, Printed at Amsterdam, 1700. containing Three Volumes, valued at 30 Crowns. From the Library we went into the Gardens, which are well disposed and large. Those Plants that are most remarkable, are chiefly Exoticks, and especially of the Erratick kind: the Choicest of which are these.

Pyrocantha Spinosæ, fructu sorbi Aucupariæ, Folio pyri. This *Leonard Pluckenetus* has excellently Delineated among his *Virginia Plants*, under the Name of *Mespil. aculeatæ, Pyrifolia, denticulatæ Splendentis, Fructu insigni nitido.*

Azedorach Avic. with a Blew Flower and Jasamine Leaf, almost like the Ash: 'Tis a Shrub with a regular Flower, and round soft Fruit.

Laurus Americana. The *American Bay.* *Francis Sheerbeck* in his Culture of the *Lemon*, gives us the best Figure of this Plant.

A Journey into

Colocasia, is the great *Arum*, or *Wake Robin* of the *Egyptians*.

Malus Aurantia Fol. Salicis, The *Orange Apple*, with the *Salley* or *Willow Leaf*, a rare Species, which *John Bapt. Ferrarius* takes notice of in his *Hesperides*.

Ladanum, or *Labdanum*, with a White Flower like the great White *Rose*. This Fruit by reason of its size or talessness is rare in these Countries, and the Flower was wonderfully admired by *Mr. Turnefort* himself, who the Year before he went to *Muscovy* call'd at *Hamburgh* and saw this Garden.

Acacia Cornigera, is a Thorny Shrub that bears its Prickles like Horns.

A Curious scarce Species call'd *Ficoides*, whose Leaves are thickest and most Juicy in their extremities.

After *Ayzæides*, a sort of *African* Fruit, very good to Eat.

Cereus, *Houſeſeek* exceeding the Stature of a Man in Height: This *Mr. Turnefort* describes under the denomination of *Melocacti Americani* *Monocloni*; but *Dr. Hans Sloane* in his Catalogue of *Jamaica* Plants, calls it the Gross or large *Houſeſeek*, with Red Fruit within and without.

Tithy-

Tithymalus Africanus, *African Tithymal*, divided round about with a Beautiful White Flower, which we find describ'd in the Natural History of *Imperatus*, under the Name of *Tithymal of Mauritania*.

Rapum Sancti Antonii, St. Anthony's Turnep, a Plant newly transmitted from *India*, and is esteem'd by the Gardeners a rare Specimen of *Hortulan Exoticks*. In its height and Flower it perfectly resembles a Tower.

These are the Things which I found worthy of Observation at *Hamburg*, besides other things which are vulgarly seen by every body: But before I take my leave of this Place, I cannot but return my grateful Acknowledgements in remembrance of my good Friends, who heap'd upon me Favours, and which I am oblig'd Publiquly to return. Among thete I cannot forget Mr. *Muller* and Mr. *Luttmann*, both Reverend Pastors in *Hamburg*, the latter of whose Brother in Law, Mr. *Heidridder* a Merchant in *London* I am infinitely oblig'd to, in all the good Offices of Friendship and Affection: And here I ought particularly to remember Dr. *Nehmitz*,

who was a very Successful Physician in Hamburg, and to whose kindness I am Indebted for the Favour of being introduced into the House of Mr. Dangerfeld, Resident of the King of Poland, Elector of Saxony, where I was entertain'd with a great deal of Honour and Respect, for all Persons that know Mr. Dangerfeld, must acknowledge his Kindness and Humanity to Strangers, how splendidly he Entertains in his own House; so that it is scarce credible to believe his Generosity, together with the Magnificence of his Furniture, the civil Reception all People meet with from him, for which reason I shall rather choose to pass by some of the just Merits of this Gentleman, out of Veneration of his Character, than by my poor remembrance of his Favours, or relation of his due Praises, detract from his Grandure, or lessen his Municience.

From Hamburg, towards the latter end of September, being conducted by two Silesia Merchants, I came to Amsterdam by the common Road of Boxtude, Bremen and Lingen, but not staying in Amsterdam, I went directly

directly for the *Hague*, where waiting for a ready Passage for *England*, I departed thence for *Roterdam* with Mr. *Stanhope* Envoy from the Queen of Great Britain. Here before I pass'd the Seas, I had a desire to see Mr. *Bayle*, but by reason of his Sicknes, which afterwards prov'd Mortal, I was denied admittance, and Mr. *Leers* the *Book-seller*, who was very Intimate with Mr. *Bayle*, and is a Man of Prudence and Learning, assured me that the Excuse was not fain'd, but the reason why I could not have access to him, was because he had been Sick some Months, of a very severe Indisposition, that all his Juices and Blood were Exhausted, with a grievous discharge of Blood and Corruption, so that now it was difficult for him to Speak, and that this had occasion'd a great delay in some Writings that were expected from him, and a Defence he had design'd to make to his Adversaries. After two or three Compliments that I made to Mr. *Leers*, I had nothing left to do, but to proceed to *Helvoet Sluys*, where the *Pacquet Boat* lay, in order for *England*. It was *Sunday*, and about

Seven

Seven a Clock I went on Board, which was the first time I had committed my self to the Waves, and the next Day by Eleven a Clock in the Morning we arriv'd at our wish'd for Port, call'd *Harmick*, and tho' the Winds were very strong and Tempestuous we had a favourable Voyage, the following Day I set forward for *London*, where I came the First of *October* to my Admiration; for a Stranger cannot without Wonder gaze upon this prodigious City, which is certainly the largest in Christendom: In its length, together with the Suburbs, which is hard to distinguish from the City, it is Seven *English Miles*, which scarcely exceed a *German Mile*: Whether the Number of Inhabitants are more than that of *Paris*, I have nothing to do to determine, but this is certain, in the great Streets and publick places of Resort, there are at all times such a concourse of People, that no body can avoid the Crowd that Walks a Foot; to say nothing of the eminent Danger from [the perpetual hurry of their publick Coaches. I shall not go to give you my Opinion of every distinct thing in this City,

City, or an *Encomium* of the Beauty and Ornaments of *London*, lest the Splendor of so August a City shou'd be diminish'd by my weak Description; but I shall remind my Friend of some of the most remarkable things that occur to my Memory, and I hope where I am deficient you will supply it.

The first place I Visited of Publick Buildings, was that great publick Hospital of the *Charter-House*, where there is scarce to be found another throughout Europe, which enjoys such a large Treasure from the Legacies and Gifts of Great Men, so that its Revenue is computed at Five Thousand Pounds a Year Sterling. There are both Old Men and Boys Maintained, but the largest Share is for Orphan Children Born of good Parents, who are Instructed in their Infancy, by Masters who educate 'em in Virtue and Humanity; neither do the Advantages cease in their Childhood, for such as are qualified by Learning for the Universities, are sent to Cambridge, (Here our Author was Misinform'd, for either University is the same,) where a certain

tain Salary is allow'd them to prosecute their Studies.

The Monument. The Monument, which is a great Ornament to the City, was Erected in Memory of that Dreadful Fire, in which the principal part was Burnt in the Year, 1666. I cou'd not but admire to find such a Stupendous Obelisk, rais'd in so abject a Corner of the City, but they told me that Place was pitch'd upon for the Monument, because the Fury of the Flames in that fatal Fire was there Extinguish'd, [*He was misinform'd, being where it began.*] in the mean while, that Space upon which this Magnificent Work is to be seen, is so narrow and strait, that from the Foundation it is difficult to look up to the Top of the Building, being so surrounded with Houses.

The Bridge. The Famous Bridge of London, which carry's you to the other part of the City, and is the Road to the Bishop's Seat, no Body that passes over it wou'd take it for a Bridge, because it is built with Houses on both Sides, so that there is but one place only where you can look upon the River of Thames. [*You may find by this*

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this how strangely our Author has been impos'd upon, for in Three things every one are False, in the First he took Southwark for part of the City, in the Second Place Lambeth for the Bishop of London's Seat, and in the next Place, there are Two Openings on the Bridge, instead of One that he only mentions.

In the *Tower of London* I was show'd *The Tower*, the following Curiosities, as First, The Ancient Arms which have been kept since Queen *Elizabeth's* Reign, and her Conquest over the *Spaniards*, for which these are shown as a Testimony of her Victory: There is another Place where the Kings of *England* are in full Proportion on Horseback, with the proper Armour they use to wear in Battle: In a lower Gallery, which is part of the Great Armory, are all sorts of Instruments for War, among which they show some Brass Pieces of Canon, which were cast at *Sevil in Spain*, by a *German* Artist, and lately taken at *Vigo*, over these are placed a vast and almost infinite Number of Warlike Stores, to Arm both Horse and Foot; these are not Old, but adapted

ted to our Modern way of Fighting, besides which they are kept wonderfully Clean and disposed in a beautiful Order; for which end there are a certain number of Artificers constantly Employed to keep them from Rusting, and do other Necessary and Daily Work. The Person that shew'd us this Arsenal, told us here were Arms and other Expedients for War sufficient for a Hundred Thousand Men. From Hence we were conducted by a Woman with Candles under Ground, to shew us the Royal Treasury, or Repository for the Regalities, which were chiefly the following Pieces.

1st. The Imperial Crown, with which all the Kings of England, from *Edward the Confessor's* Time had been Crown'd.

2ly. The Imperial Globe, which has a Diamond on the Top of it, half whose Thickness is above an Inch.

3ly. The Imperial Scepter with a Cross upon it, and a Diamond of a vast Price.

4ly. A

4ly. A Scepter with a Dove upon it, as the Emblem of Peace.

5ly. St. Edward's Slipper made of Beaten Gold, which is carried before our Kings at their Coronation.

6ly. A Precious Salt-feller made of Gold and Jewels, representing the *Tower of London*, and set upon the Table at a Coronation Dinner.

7ly. The Sword of Mercy, which is betwixt the Two Swords of Justice, the Spiritual and Temporal, and carry'd at the Coronation Time.

8ly. A Silver Bowl Gilt, in which the Royal Family us'd to be Baptiz'd.

9ly. Another Cap, yet larger than the former, which was given to King *Charles the Second* by the Town of *Plymouth*.

10ly. The Queen's Diadem, or Circle that surrounds Her Head at Her Coronation.

11ly. The Crown made for the Coronation of Queen *Mary the Second*.

12ly. The Royal Globe and Scepter for the same Queen.

13ly. The Crown of State, which the Queen Wears when She Sits in Parliament; this has Seven Emeralds, taking

taking in the Circumference of an Inch, likewise a large Oriental Pearl of an uncommon size, and a Ruby of an Immense Price.

14ly. A Scepter very Beautifully form'd of Ebony, whose Top is Adorn'd with a Dove, which King James the Second's Queen us'd at Her Coronation.

15ly. The Golden Arms and Spurs, us'd as before at the Coronation.

16ly. The Sacred Vial, representing an *Eagle*, Cast from Pure Gold, in which the Holy Oyl is kept, that is us'd at the Unction of the Kings or Queens of *England* at their Coronation, which Two last are the most Ancient Reliques in the Royal Repository.

Bedlam.

Among the Rarities of *London*, that Magnificent Structure in *Moorfields*, call'd *Bedlam*, is to be reckon'd One, which at the first Entrance one wou'd take for a King's Palace, rather than a Receptacle for Madmen and Fools. Neither did that *Frenchman* wrong the *English* much, who said of their Singularities, that the Magnificence of the *Londoners* in their Madhouses, was scarce Inferior to the *Louvre* in

Paris;

Paris, and whatever the King himself might be, sure there must needs be a vast Number of Fools among their Great Men, that there was occasion for such a Sumptuous Mad-house. This Building was Finish'd in the Year, 1676. and Cost Twenty Thousand Pounds, *English Money*, which was Paid by the Citizens of *London*. The Two Lower Galleries of the Building are divided into little Bed-chambers, where the Sick are laid, and there are others up higher, where the Physicians order those that are not fit to be expos'd to the Spectators, and it rarely happens but there goes out Forty every Year Perfectly Cur'd, or at least in such a Condition as to pursue their Business.

Not far from hence, just out of *Hoxton*, the Suburbs is a Publick Hospital at *Hospital*, the Founder of this was one Mr. *Ask*, this serves to Maintain Twenty Old Men and as many Boys: The Building is Clean and Handsome enough; before this had been Built many Years, it receiv'd an Augmentation by the Legacy or Gift of Mrs. *Leade*, a Matron of great Reputation.

A Journey into
BRITAIN

The College of Physicians is Situate in Warwick-Lane, near Newgate. Dr. Harvey in the Year, 1652. Built this College and Library, and gave it all its other Ornaments; [This shows how Travellers may be imposed on, or rather how negligent they are in their Observations, for the very Inscription at the Entrance into the College would have shewn him, how far Sir John Cutler had been a Benefactor to this Place.] It enjoys Eminent Privileges by several Acts of Parliament, whose Power extends to all Foreigners, so as to Prohibit their Practising Physick within Seven Miles of London, without being admitted so to do from the Authority of the said College, which consists of a President, Chose every Year, Four Censors and Eight Elects, but there are Forty Fellows, besides Candidates and Licenciates, not reckoning the King or Queens Physicians, who are admitted of Course, and who were at that time Dr. Hannes, Dr. Laurence, Physician of the Hospitals Abroad, Dr. Lister, who in King William's Time attended the Earl of Portland to France, and afterwards Writ and Publish'd a Treatise called

A Jour-

A Journey to Paris, Dr. Hans Sloane, Fellow of the Royal Society, and Dr. Arbuthnet, a Scotch-Man, Chief Physician to the Prince of Denmark; but there are others who have the Preference by means of their Practice, as well from the Queen as the Chief of the Quality.

Gresham College stands in Bishopton ^{Gresham College} gate-Street, and of late, has been Famous for the Royal Society, which meet together on Wednesday in every Week; this College had its Foundation under King Charles the Second, about 1663, and consisting of a President, Council and Fellows. The Musæum of Natural Rarities in the College is Curious enough, excepting the Anatomical Preparations, which are Trifling and of no Value; I much wonder they should keep the Sceleton of a Mouse among the rest of their Curiosities, which was made by a Friend of mine at Ratisbon, who was then in London, and has great Encou- miums upon it by the most Skilful Anatomists; tho' the Man knew no- thing of Anatomical Matters. Mr. Daniel Colwell gave the Chief Part of the Natural Rarities, which he had brought

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from both the Indies to this Place; a Catalogue of which, and all contain'd in this Repository, Dr. Nehemiah Grew Publish'd under the Title of the *Museum of the Royal Society*. Here is the Arundelian Library. In my time there was an Eminent Mem-

*Dr. Wood-ber of this Society call'd Dr. Woodward,
wards Cha- who was a Practical Physician and a
rafter.* wonderful Man in the Knowledge of Nature, which his Natural Geography, lately Publish'd, (meaning his Essays, &c.) [Confuted by J. A. and W. W. in their unanswerable Examination of it.] makes evident, and which was Commented upon in Switzerland by Dr. Scheuchzer a Friend of ours. The said Doctor is Master of an Inestimable Treasure of Minerals and Shells which are Petrified, part of which he himself collected in Britain, and the rest he has with much Diligence obtain'd from all the Corners of Europe, as Specimens of the Scarcest and most Curious Minerals and Petrified Shells. He has likewise a Choice Collection of Books in Physick and Philosophy; and it is to be Lamented that this Famous Man is not Master of the Latin Tongue, nor

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nor can you Understand him unless he Speaks Earnestly, and then it is with much Difficulty and straining of the Voice that he shows his Curiosities, which when you See, you must take care you Touch not with the tip of your Finger, neither look into his Books except he hold 'em to you in his own Hands. Before I leave speaking of this College, I must remember Dr. *Sloan*, who Worthily enjoys the Honour of being Secretary to this Illustrious Society, tho' his Dwelling House is remote from the College, he living in *Southampton-Square*. I cannot possibly tell you what a Collection of Natural Exoticks this Exellent Physician has got of all kinds, which he collected in part, from the *West Indies*, and which in great measure were munificently bestow'd upon him by a kind Benefactor: Among the rest were *Tortoise Eggs* which were found by himself upon the Coast of *Jamaica*; he also shew'd me a Glass Bottle, which a Curious Mariner took up on the Shore in the *Mediterranean*; this was almost grown over with White Coral, which was very Pleasant and Curious to look

Dr. Sloan's Character.

D 3 upon,

A Journey into

upon, and which gave some light to the diligent Enquirers after Natural Curiosities, to observe the manner of the Generation of Marine Bodies; but the Glass Bottles differ'd nothing from those we have now adays with Spanish Wine, or flat like your *Frontignac* Bottles. I shall say nothing of Dr. Sloane's Library, which for Physical Books is not to be match'd in *London*; but I heard it Commended by Dr. Hudson, Library Keeper at *Oxford*, who said that if there were some Medicinal Books wanting in the *Bodleian* Library, he doubted not but Dr. Sloane's cou'd Supply it.

There is another mighty Ornament and Honour both to the Physicians and Surgeons of *London*, which is Dr. Cyprianus who was sent for from *Holland* in King William's Time, by Sir Thomas Millington the King's First Physician, who in a short time got the Envy of all from his Eminent Cures, and particularly his Fame in Cutting for the Stone: The first of which Operations he perform'd in *England*, was upon the said Sir Thomas Millington President of the College of Physicians, and who was then above Sixty Years of Age, whom he happily Cur'd: So

Dr. Cyprianus's Character.

that

that he could not but rise at once to the utmost degree of Reputation in his Profession, and what he is further Famous for, is, his unheard of *Cesarian Section*, which he perform'd with Applause, before several Eminent Persons in *Holland*, where he took out of a Woman that had gone One and Twenty Months with Child, a Rotten or *Putrid Fætus* with the *After Birth* entirely Whole, and this, not from the Womb, but the *Tubes* of the Womb, and by this means freed the Miserable Mother from the evident Danger she was in, which is an uncommon and unheard of Precedent or Example. The Author has Publish'd the whole History, by way of Letter, Printed at *Leyden*, 1700. It is a rarity to find such an Excellent Surgeon, endow'd with so much singular Humanity and Modesty among those sort of Men; for I have observed amongst most of the *Chirurgical Operators*, both in *England* and *Holland*, a strange kind of Rusticity of Manners and Ill-Nature, which they contract by their continu'd Austerity and necessary Cruelty to their Patients, in performing their Operations. But before I leave the

Curiosities of London, I must take notice of that Famous Library, Situate near that Ancient and Magnificent Building of Westminster-Hall, call'd the *Cottonian Library*, Founded by Sir Robert Cotton. This is adorn'd with the Scarcest and most Ancient Manuscripts, especially such as relate to the Ecclesiastical and Political History of England; you may likewise see in this Place a Greek Fragment of a Holy Evangelist, the Letters whereof are Painted in Gold and Silver, which for its Curiosity is esteem'd the Oldest Manuscript in all Europe, to say nothing of that vast Collection, of Old Roman Idolatry, with English and Saxon Coins.

There are many more Valuable Libraries and Curiosities in and about London; as those of the present Bishop of Ely's, the Earl of Sunderland's, Earl of Pembroke's, Earl of Carbery's, Lord Sommer's, Mr. Harley's, Mr. Bridge's, Mr. Bernard's, Dr. Tancred Robinson's, Dr. Mead's, Dr. Gray's, Mr. Collins's, Mr. Slater's, Mr. Rawlinson's, Mr. Clavel's, Mr. Topham's, Mr. Aston's, Dr. Goodman's and many others.

As for Animals, Plants and Fossils, there are Large and Curious Collections in the Hands of Mr. *James Petiver*, Mr. *Dandridge*, Mr. *Dubots*, Mr. *Stonestreet*, Mr. *Buddle*, Mr. *Parry*, and others in both our Famous Universities.

Not far from *London*, in the Neighbourhood of *Westminster*, I was pleas'd with the Sight of that Large Hospital of Invalids, call'd *Chelsey Hospital*, Chelsey Hospital. which was first Founded by King *Charles the Second*, in Remembrance of whom, there is a Statue Erected in the Middle of the great Square. This Magnificent Piece of Building is Worthy such a Founder; it has a Chapel with Two Chaplains, a Physician and Apothecary. Maintains Four Hundred and Seventy Six *Invalids*, besides Officers, Attendants, &c. The Payment of whose Salaries amount to Three Thousand Pounds a Year. The Reader may easily Correct this imperfect Account, which is much of a Piece with the rest of what he Speaks of in this Country. Another Hospital very Magnificent at *Greenwich*, for Seamen.

Among

A Journey into

Among these publick Places I shall reckon *Apothecaries-Hall*, not far from *Ludgate*, to which Mr. *Godfrey* conducted me, who was formerly Master of the *Laboratory* or *Operator* there, but now he lives in another part of the Town, having a House near *Covent-Garden*, from this place all the Apothecaries take their Medicines, as well the great Compositions as the Chymical, as their Occasions require. In Conversation Mr. *Godfrey* told me many things concerning Mr. *Boyle's* Curiosity in Chymistry, in which he took abundance of Pains in preparing the *Phosphorus*. He acquainted me with the Excellency and Advantage of English Pewter, which being made of *Martiated Regulus of Antimony*, *Copper* and *Bismuth* of equal parts, composed the best Pewter; but that the *Bismuth* which was us'd in this, came all out of *Saxony*, and that there was none to be met with in *England*.

The Court
of Great
Britain.

Of the present State of the Queen of Great Britain's Court, I shall just touch upon, but as far as I had opportunity to see it, I think it very Splendid and Great. I saw Three sorts of Military Orders in the Court; the First were the *Horse-Guards*, which attend

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attend the Queen when She goes A-broad, and Ride before and after Her Coach, and of these Two always fit on Horseback with Drawn Swords at the Entrance into St. James's Court.

[Which is a Mistake, for the Horse-Guards are Entering into St. James's Parke,] The next are Foot-Men, Habited like Swiss, with Scarlet Coats laid with Gold, and Gilt Halberts, [He describes these for the Yeomen of the Guard.] A Third sort consists of Gentlemen of Families, which are the Gentlemen Pensioners, call'd by our Author the Gentlemen's Guard; These only attend in the Court with short Halberts and Rich Cloths, placing themselves in Order for the Queen to pass by to Chapel, or upon other Solemn Occasions. Two Chaplains attend on Her Majesty every Month, some of which appear to be but Young Men, who are not presented to Her by the Archbishop, but Recommended by some of the Nobility about Her Person. Those sort of Gentlemen of the Sacred Robe, are wont sometimes to indulge the Gaiety of their Youth, as it happen'd once in King Charles the Second's Time, that one of these Chaplains

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Jains Riding a Hunting with the King
was Thrown from his Horse, the King
wondering at the Frolicksomness of
the Clergyman, ask'd one of the No-
bility in his Company who that was
who answer'd the King presently, ac-
cording to the Phrase of our Author
Sir, *This is Your Majesty's Jagt Chap-
lain.*

Of the State of the Church in *Eng-*
land, this is observable, that at first
appearance you can scarce distinguish
their Conformity from that of the *Ro-*
man-Catholicks, or be much instructed
by the Worship that the Bishops and
Canons seem chiefly to Understand
[*I suppose he means Cathedral Worship.*]
Among the Parish Priests, I have ob-
serv'd a great deal of Poverty, so that
they lead Miserable Lives; to Cure
which grievous Evil of Indigency in
the Clergy, the Queen has caus'd all
that Revenue, which us'd to arise from
the Tenth^s of their Benefices, to be
distributed among the Poorer sort of
them.

But the Poor Priest must sit in Mour-
ning still; for the Remainder of so
many Years of this Revenue is still to
come, it having been given away by
the

the Liberality of *Charles the Second* and
the late King *William*; so that whether
they will or no they must wait in ex-
pectation, till the course of Nature
pays their Debts, and then obtain a-
nother Pension from King *Charles* in
the next World.

This brings to my Remembrance the
Duchess of *Cleveland*, who was an ^{Duchess of Cleve-}
Apothecaries Daughter in *Paris*, and ^{land and}
came from thence to *London* to be ^{Port-}
Touch'd by King *Charles the Second* ^{mouths}
for the Cure of the Evil, which she
then labour'd under, but the King
observing her Beauty in the Touching
of her, was so Charm'd with her that
he afterwards allow'd her One Hun-
dred Pounds a Month. [Where our
Author pick'd up this Story, or the fol-
lowing Account he gives, will be hard to
guess, but we may see by this, how easily
Travellers are impos'd on.] But to
proceed: The Duchess of *Portsmouth*
likewise tried the King's Clemency and
Liberality, for she had an uncommon
Allowance of a Thousand Pounds a
Month, as much as Queen *Mary* had
allow'd by King *William* and the Par-
liament to Support her Court and Fa-
mily: [This is a plain Mistake of the
Author.] But

But why do I wander from my Subject, for Order requires that I should proceed to the Cathedral Church of St. Paul, the Royal Palaces, Courts, and a Hundred other things, that are worthy of Observation in this City, but I shall not spend my Time on so copious a Subject, since there are so many good Authors, both Ancient and Modern, who have described London so Accurately, among which are *Collier* in his Description of England, *Fouvin de Rochefort* in his Journey to England, and which I should have named in the first Place, Dr. Chamberlain in his Present State of England; however I cannot but say something of the *Stupendous Building* of St. Paul's, which tho' it is not finish'd, has been almost Fifty Years since the Foundation, and during which time there has been a vast Number of Workmen and Artificers Employ'd; And several Citizens of London told me they hop'd to see it finish'd in Five Years; which wonderful Work then will exceed the Temple of *Ephesus*, and whatever the Romans or the Ingenuity of so many Ages before us has produc'd.

S. Paul's.

From

From London I went in November to *Oxford*, which is above Sixty English Miles, particularly to take a View of the *Library*, *Physick Garden* and *Colleges* of that University. Oxford is worth our Notice every way ; if we regard the University, Colleges and Library, to be compared with none, if the Learning that flourishes there, this will yield to no other University ; the Colleges are Eighteen, all well Built and liberally Endow'd, but that which excels the rest is *Corpus Christi College*, which has an incredible Revenue Yearly coming in. I was here singularly obliged to Dr. *Hudson* Library Keeper, for his extraordinary Humanity to me in showing me the Publick Library which is kept in *University College*, [Here the Author mistakes the Place for the Person, Dr. Hudson being of *University College*, but the Bodleian Library is in the Publick Schools.] this was Founded above a Hundred Years ago, by *Thomas Bodley* of *Exeter*, who according to *Casaubon's* Testimony left 200000 Livers for the Building. *Selden* by Will gave his exquisite Library to this place, and *William Laud* Archbishop of *Canterbury*, with others much

Aug-

Augmented it. I was amaz'd at the incredible Number of Books so artfully dispos'd, and the Building that is made to accommodate them; near to which adjoining is a Spacious Gallery, Adorn'd on both sides with Paintings of the most Illustrious Men, which Dr. Hide has incerted in his Catalogue of the Bodleian Library, Printed at the Théâtré, in Fol. 1674. Under the Effigies of *Thomas Bodly* are these Words, *Hospes rogatus siste, Bodleumque loci genium & Musarum Mecenatem ultra Cæsarem Augustum, qui Bibliothecam molemque hanc stupendam condidit, intuere, Hoc volebam, nescius] ne essem Vale.* In the same Gallery is the Repository of Coins, and among the Scarcest and most Rare, a Specimen of the English Pound, which is Silver Money of a Four Square Form, with the Effigies of King *Charles the First* on Horseback, done 1642. I afterwards enquir'd of Dr. *Hudson* concerning the Manuscripts of *Roger Bacon*, whether that was any part of 'em which was Entituled the *Theater of Nature*; but notwithstanding the Library Keeper sought 'em diligently in all the Catalogues and Cabinets of Manuscripts, yet

yet he could not find them, but he thought they might be stole. I search'd among the Printed Books, but all in vain, for one entituled *Petri Arlensis de scindalapis*, of the Sympathy of the Seven Metals, and precious Stones to the Planets; an Edition of which was printed in Folio at Madrid and Rome, before that spurious one printed at *Paris* 1610 in *Octavo*, a Transcript of which I had found sometime since at an Eminent Man's in *Germany*. Likewise I look'd after the Prints of some Illustrious Men of *Asuerius*, but with the same Success. That which I wonder'd at, Dr. *Hudson* informed me, that the Revenue would not furnish them with Money, to buy new Books, and others that were wanting in the Library, tho' he own'd it was constantly endow'd with Legacies, and other gifts of Curious Men that made daily Accession to the Library. Dr. *Hudson* himself had now lately added a new Catalogue of the Library to that which before was done by Dr. *Hyde*, and said that there was then a new Impression of *Livey* doing in the Theatre, with the Addition of some Decades, which as yet were suppos'd to be lost. Beside the Libra-

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England
y I frequently visited the Physick Garden, where Mr. Bobart, who is an Eminent Botanist, and one of great Civility, is the Keeper and Professor; at the entrance over the Gate you have this Inscription, *Gloriae Dei, optimi Maximiani, Honoris Caroli Regis, in usum Academiae, & Republicae 1632, Henricus Comes Danby.* Henry, Earl of Danby, built this for the Glory of the Great and Good God, to the Honour of King Charles, for the use of the University, and the Publick Good.

The Physick Garden.

This Garden is famous for scarce Plants and Exoticks of all Kinds, the choicest of which Mr. Bobart shew'd me. The first was the

Sorbum Veram, The Sorb or Quicker Tree, which bears the same Flower and Leaves with the *Sorbus Aucuparia*, but the Fruit is different, and more like a Pear, being fleshy, and of the Medlar Kind. This Tree only grows in one woody Place in England, and that is in Worcester-shire, from whence this Species was propagated.

Helianthemum, or Sun Flower, of a Flesh colour and five Leaves.

Scyllam Veram, which has a six leav'd Flower, almost of a lead Colour.

Ten-

Tentrium Boeticum, a sort of Chame-
drys or Germanander.

Arborem Balsami Peruviani, which is
a Species of the Fir Tree, but excels it
much in a fragrant sweet smell. This
Shrub is already two Cubits high, from
a seed which Mr. Bobart had transmit-
ted to him seven Years ago from a Co-
lony in the Kingdom of Mexico.

Cedrus Vera, the true Cedar from
Mount Lebanon, with Leaves like a
Star, produc'd from Seed, as that be-
fore,

Pistacia Vera, the true Pistach Tree,
with leaves like a Walnut; the Fruit
or Nut is very grateful to the Stomach.

Among the rest I wonder'd to see
such a vast quantity of Yew in this
Garden, of which there are whole Fi-
gures or Statues, two of which are vi-
sible at your Entrance into the Gar-
den of Distinct Sexes, the one repre-
senting a Man which bears a Berry, the
other representing a Woman which bears
none. In Conversation Mr. Bobart
mightily commended the famous Revi-
nus Method of Plants; and Mr. Sherard,
an Englishman and an accurate Botanist,
whom I saw when he went thro' Lip-
sick in the Year 1698, after he came

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from *Smyrna*, where he had been Consul for the English Nation.

I had Letters also to Mr. *Edward Lluyds*, Keeper or Inspector of the *Ashmolean Museum*. and though he was absent, his Servant show'd me all the Rarities. This famous Edifice is just by the Theatre, and was built in 1683, at the charge of the University, with a Chymical Laboratory, and a Library, beside the *Museum* enlarr'd by the said University; at the Entrance of the Door, the following great Letters are inscrib'd in Gold. *Museum Ashmoleanum, Schola Naturalis Historiae, Officina Chymica, Ashmole's Museum*, the School of Natural History, the Chymical Office or Laboratory. The Founder of this was *Elias Ashmole Esq*; but it receiv'd a considerable Augmentation from the Gift of my Lord *Huntington*, who was Master of many *Egyptian Antiquities*; likewise Dr. *Martin Lister*, adorn'd this *Museum* with a large Collection of Natural Rarities, but what is most worth your Sight, is an entire *Egyptian Mummy*, which Mr. *Goodyear* lately gave to this Treasury of Nature.

*The Thea-
ter.*

Next hence, as I have said before, is the Theatre, which takes its Name from

Dr.

Dr. Sheldon, sometime Archbishop of Canterbury, who was the generous Benefactor; it is a Specimen of accurate or nice Architecture, and in this you may see a true solid Piece of Building, which was erected for the Publick Exercises of the Scholars, together with a Printing House, all which were built in the time of King *Charles* the Second. I spent eight Days in surveying the Libraries, Colleges, &c. and was entertain'd with much Honour by Dr. Hudson, who dismiss'd me from thence with Letters to Dr. Sloane at London, whither I return'd by the same way I went, and staying three Weeks after there, I began to think of returning into Holland.

But before I left that Place, I had frequent Conversation with a Divine of the Evangelical Religion, who had been an Inhabitant in England for Thirty Years, and to whom I was recommended by Friends in the Country. He carried me sometimes with himself to a Merchants in the City, who lived near the Monument, where I saw large Quantities, and vast Choice of *China Ware*. In our way we visited a Widow, who was lately return'd

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turn'd out of *Lithuania* by the way of *Danzick*, and who was formerly the Wife of one *Ramsey* a *Lithuanian*, who had liv'd in *London* sometime before he went back to his own Country. This *Ramsey* had gain'd an Intimacy with Mr. *Boyle*, by reason of his Knowledge in the *Latin Tongue*, which that great Man made use of, he serving as it were an *Amanuensis* to him, and as it is believed, Translated several of his Philosophical Pieces out of *English* into *Latin*. But however it was, 'tis memorable, that this *Ramsey* after Mr. *Boyle*'s Death, whether out of a Love to his Country, or that he cou'd not subsist himself longer at *London*, went over to *Lithuania*, with his Wife who was a *Scotch-Woman*, where he settled at *Cavena* near *Cronon*, of which Place he was Pastor, and preach'd to a Congregation there. After his Death his Widow return'd to *London* again, carrying along with her the Library and Manuscripts of her Deceas'd Husband, which his Friend and I survey'd, tho' they were not so valuable as we imagin'd. In walking we entered into several Subjects, among the rest my Friend affirm'd

firm'd to me, that the Word Person in the ever Blessed Trinity, was not to be found in the Holy Scripture, neither cou'd he approve of the Opinion of Mr. *Edzard Pastor* of the Swedish Church in *London*, who thought that the Representation or Presence stood for the Name of the Person in the Old Testament; *and* asserted he cou'd not conceive in his Mind, how the Eternal *Adyos*, if it was the Second Person of the Holy Trinity from Eternity, cou'd constitute in the Womb of the Blessed Virgin, one Person only in Number, with the Human Nature in Christ: For then our Saviour might well be call'd a Person, when he is consider'd in that State, in which he was plac'd in this World.

Concerning the State of Souls after Death, he affirm'd them to be in a Third Place; the State of the Blessed or Damned, to be detain'd perhaps as yet by the defilement of Original Sin: Otherwise the Soul of *Lazarus* cou'd not have had Existence, so as to have return'd into its former Body; and it wou'd be absurd to allege in Opposition to it, that saying of St. *John*, *Blessed are the Dead that die in the Lord*. For this is

to be understood of a certain Period of Time for the Felicity of the Church and Faithful, signified by St. John. Of the various Readings of the *New Testament*, he was of Opinion, we ought to be strict in our observance, for those deserve little Praise, who encrease the Sctiptures, and add to 'em daily: What pertains to the Omissions that have been might easily happen, because the Amanuenses made Supplements from other Manuscripts, and now and then we may accidentally meet with Manuscripts of the *New Testament*, in which the Evangelists and Apostles themselves have remark'd somethings upon second Thoughts not to be found in others. *He* was per-swaded that the *Gospel* had been publish'd in all Parts and Corners of the World, but was of Opinion at the same time, that many of the *Heathen* had only the Footsteps of the Reveal'd Word in dark Riddles and Fables. Speaking of the several sorts of *Enthusiasts* and *Sectaries* in *England*, he made mention of one *Quirinus Kuhlmann* a noted *Enthusiast*, who some Years ago was with a Companion of his burnt at *Moscow*: *He* was in *England* in the Time

Time of King *James* the Second, and deliver'd to the said Prince a Treatise of his of the *Millennium*, or the Thousand Years of Christ's Personal Reign: A little after he went to *Holland*, where he gain'd vast Numbers of *Pro-selytes* by his Sacred Expeditions of *Millenarists*, besides here he asserted his Blasphemies, affirming his Wife was with Child of a New *Messiah*, and that from him the Kingdom of the Father, and of the Son, shou'd be shortly fulfill'd here on Earth. I took occasion to mention this, because there are many still of Opinion, that the said *Kuhlmann* unjustly suffer'd Death in *Russia*.

It is known but to few that the *English* do not begin the account of their Year from the first of *January*, but from the Annunciation of the Virgin *Mary*, so that it is certain King *Charles* the first lost his Head on the 30th of *January*, 1648. notwithstanding the *English* Annals affirm it to be 1647. I also made some enquiries relating to *Pensylvania*, if it was known to them there, that there was a College of *Adepts*, which the Person I enquir'd of, satisfied me in the Negative, saying he himself had been curious to find

find out if there was any such thing, but never cou'd obtain any account to be depended on, either by Letters or Friends, several of which he had in *Pensylvania*: And further I found that the State of that Colony was not so happy and flourishing as Foreigners have perswaded themselves; for that the chief of their Business consists in Agriculture, because you may purchase a large Tract of Land for a little Money, which perhaps they cannot totally enjoy, because they are not entirely secur'd from the Irruptions and Devastations of the Natives, or wild *Indians*. All those who have inhabited this famous Colony to this Day, have been of that Sect of Fanaticks call'd *Quakers*, who have forsaken their Country for lucre of gain here, or for some other reasons have not only inhabited *America*, but some other parts of *Europe*, especially *Germany*, where the People being deceiv'd by their Relations, have hitherto thought this *Pensylvania* a Paradise; such a one lately was *L. Mentz Langensalza Thuringia*, who going a Year before, and when he had seen the Country, so deceiv'd the rest of his Family and Relations with his Lies and Boastings,

ings, that they pack'd up all their Riches and what was valuable, and were going with him to *Pensylvania*, where they had been all this Time, having desired a Passport from the Queen, which was prevented by the Prudence of Mr. Kirchner Resident of the King of *Poland* to the Court of Great *Britain*. So that this good Man with his cheated Companions were forced to return to their own Homes again. I cou'd wish, that my mentioning of this Story, cou'd bring to Mr. Kirchner that just Praise that is due to him for this Action, but his other Merits will eternize his Fame, and I am satisfied however to have the Pleasure of remembering his Name, who has done me so many good Offices, to return which I am satisfied I shall never be capable.

Being now furnish'd with Letters of Dr. Albin and his Curiosities. and Money from *England* by Mr. Oliver a *London Merchant*, to whom I am eternally oblig'd for his constant Civility and peculiar Humanity, I return'd the first of *December* for *Holland*, being first bound to *Ratterdam*; where I arriv'd after a tedious Passage, being detain'd by contrary Winds at Sea, where we lay beating by the Sea and Weather

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Weather for some Days. From hence I went to *Leyden*, where I had Letters of Credit from *London*, which I deliver'd to the Ingenious Dr. *Albin*; the Memory of this consummate Physician is very agreeable to me, for I cannot relate to you, how friendly and civilly he receiv'd me, tho' a Stranger and unknown to him: He shew'd me his *Treasury*, consisting of Medicinal and Natural Subjects, and in Discourse with each other, he reminded me of the Root *Gensing*, of which vegetable Extotick he had a large Quantity by him, gain'd by the Bounty of the King of *Prussia*, by whose Command he had made several Experiments after different Ways and Modes, after all which he cou'd find no other Method, but that the plain Way of chewing it, was the best, and that it had the same Force and Virtues with our common Turnips. I saw at the same Place some *petrified Vipers* of *Milite*, all which wanted Heads, which was very remarkable. He had likewise two Articulations of a human Finger that were Petrified, in which all the *Apophyses* were to be seen accurately express'd. He held the same Opinion concerning the

England and Holland.

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the Universal Deluge with Dr. Woodward of *England*, to wit, that the whole Surface of the Terraqueous Globe was broke, and separated, and that from thence Mountains were formed which were not extant before the Flood.

I often visited Mr. *Muschenbroek's*, who is the most famous Mechanick of his Time, I saw his Laboratory or Shop which is very instructing, and his Collection of Instruments as well for Natural Experiments as Chyrurgery, a Catalogue of which with their Prices, I have here set down.

A Catalogue of Instruments which are Sold by John Muschenbroek at Leyden, 1707.

Flor. St.

A Great Air Pump with all its Furniture —	600
A small one ——————	225
One of another Form ——————	187
A Glass Fountain ——————	07
To make an Experiment of Respiration ——————	04
Holipola ——————	04
An Anatomical Syringe with 8 Pipes and a Key ——————	18

A

	Flor.	St.
A little one, with Two bending Tubes	07	
Six Tubes for Transfusion of Blood	02	
A Copper Pipe to blow up the Vessels	00	15
An Iron one for Injecting of Mercury	01	
A Pipe with a Valve	04	
An Instrument to shut the Mouth of a Dog	04	
Copper Nails of different sizes	00	02
An Instrument for sawing the Bones with six Teeth	07	10
An Universal Microscope	18	18
A Particular one	15	15
One to see the Circulation of the Blood with	07	10
A crooked Silver Catheter	06	26
A Silver one that is not crooked	05	15
A Copper Catheter	01	16
A Catheter for Women	01	04
A Silver Instrument for a Paracentesis	05	
One of Copper	02	10
A Clyster Pipe, whereby the Patient may administer himself	10	
One for Tobacco	05	
		Trusses

Trusses to hold in the Rupture	Flor.	St.
For a Man	09	06
For a Youth	06	06
For an Infant	04	
Instruments to cure such as cannot retain their Water	02	
All kinds of Instruments for restoring crooked Feet, Backs, Spine or Neck.		

At Leyden I visited the Physick Garden and Museum, but since there is a Catalogue of the Rarities there already Printed, I will not trouble my Reader therewith; but proceed to Amsterdam, where I deliver'd Letters to Mr. Kuyter, that Dr. Hudson Professor at Oxford had writ to him. This worthy Gentleman is eminently learn'd in the Greek Tongue, and is putting forth an Edition of *Suidas*, with several other Greek Authors; He commended the English, and had a singular Esteem and Love for their Learning; first of all he prais'd the University of Cambridge much, and was sorry he was call'd from thence to go to Berlin; in his Discourse he remember'd, that my Studies were bent to Physick, and therefore show'd me a piece

piece of Wood, which being put to the Fire, neither wou'd take the Flame, or wou'd be reduc'd to Coal, or Ashes, but what was wonderful, it wou'd grow white like Iron. This was try'd with success, at a certain curious Merchants at *Amsterdam*, the Master or Possessor of this asserted, this was the Wood of the *Larch Tree*, from whence *Turpentine* distils, and that it grows on the Shore of the *Adriatick Sea*. After this my only care was to get among the *Anatomists* and *Chyrurgeons* of this City. I accosted under these Characters Dr. *Frederick Ruyfch*, Mr. *Joh. Jacob Raw*, Mr. *Guevelon*, Mr. *Peter Adriams* Father and Son, Mr. *Catuye*, &c. but before others, I frequently visited Mr. *Ruyfch*, and never neglected those Hours, he set apart, to explain and demonstrate some Parts of Anatomy, for the sake and in behalf of Students that were Foreigners. It is an incredible Quantity of Anatomical Preparations, and a wonderful Treasury of Natural Curiosities that this eminent Man has in his House. He makes the curious Spectators astonish'd, to reckon up the vast numbers of Rarities which exceed belief,

belief, and of which he has publish'd seven Specimens under the Title of *Thesauraria*, that I may say nothing of his Observations and Anatomical Epistles, which are publish'd distinctly.

But I cannot forget among other Curiosities, the *Mummy* of a Boy of eight Years Old, whose Body by a certain Liquor and Art of Embalming, is kept so neat and pure after Death, that the Colour of the Skin, and the Consistence of the Muscles appear so natural both to the Eye and Touch, that they seem as if alive: All the Parts and Members of this *Mummy* are not so much as hard, but rather soft, as if they swell'd and were augmented with Nourishment and Blood. This is a wonderful Piece of Artifice, that this famous Man has excell'd all in the Preparation of this *Mummy*, that it is an unheard of Thing, and not to be believ'd unless seen.

And altho' there are several Opinions guess'd at by his Adversaries concerning the Preparation of this dead Body, yet none of 'em have attempted to make the like, or demonstrate any Thing this way. Mr. Raw has said often, when we expected his Opinion

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concerning this Prodigy; that there was some wicked Arts us'd with the Boy, otherwise the Skin with the Muscles cou'd never have been so full of Blood, and kept their natural Colour. Others have been of Opinion, that he always kept the Body in a *Vacuum*, but when it was shown; but all these Conjectures are of little weight: I will tell you of others of the like Nature, and then ask your Opinion. It is otherwise observ'd from *Bilsius* in his labour'd Anatomical Piece; beside that miraculous Cutting of live Bodies, which *Meibomius* witnesseth to have seen done, as it were by a Divine Art and Hand, and which he often show'd to the Curious, but never repeated by any after him, he had a new Trick of preserving the whole Body with the Blood, Bowels, Guts, and whatever was contain'd therein, without the least danger of Putrefaction. Afterwards this Art was practic'd by *T. Andreus* another Anatomist, whom *Bilsius* communicated many Experiments to, by which means he improv'd upon the Art, so in his Progress he wou'd be some Months in opening and embalming the

the Dead Body, and so do it at leisure Times, yet that all the Parts which were flesh might not in the least seem to be decay'd. These Two great Anatomists had in their Time certainly some extraordinary Arts; but I am perswaded both are far excell'd by Mr. *Ruyssch*: Now whether this famous Man has found out any of the Secrets of *Bilssius*, or *Andreas*'s Method of Embalming, which he has so much improv'd, I have nothing to do to divulge; but what I have seen of their Anatomical Demonstrations, worth observing, I shall communicate.

1st. That the *Officula* or little Bones of Hearing from an Infant, which may seem strange, shou'd be of the same Size, in the Sculls of every *Fætus*, with those of grown Persons. We must likewise observe contrary to *Valsalvas*, the new Author of a Humane Ear, that the *Officula* of Hearing are cover'd with the *Periosteum*, and its Vessels: But *Valsalvas* admits Vessels, but not the *Periosteum*, which is contrary to the Rules of all Anatomists. For the Vessels always are concern'd for Nourishment, for which end the *Periosteum* is always appointed to the Bones.

The Cavity under the *Sella Equina*, or four Processes of the Bone *Sphenoides*, or Wedge like Bone, in Adult Sculls is supply'd with a slender Membrane or Film; and Dr. *Ruyisch* in several Subjects has observ'd, from this Cavity there is a *Foramen* or Aperture into the Spongy Bones of the Nose, with which also that Tunicle which is in the Cavity seems to communicate. In new Born Children no Cavity appears under the *Sella Equina* or Processes of the *Sphenoides*.

2dly. Concerning *Highmore's Cave*, or Cavity, which is internally discover'd in the *Sinus* of each Maxillary Bone, it is observable, Chyrurgeons and unskilful Anatomists are frequently mistaken, who if a Hurt be violent or successive in these Parts, as it commonly happens in the Venereal Disease, take this for a *Caries* or rottenness of the Bone, especially when they can penetrate so deep into it with a Probe, and find this vast Cavity.

3dly, In a little dead Body newly Born, which we dissected the 27th of December, the *Navel String* as it was observable stuck close to the Urinary Bladder, by means of the *Urachus*:

But

But the *Urachus* is nothing but the Apposition or Suspensory of the Bladder, without Perforation and Use, which will appear, if you Blow wind into the Bladder, whence you will find the *Urachus* not swell at all, but end about the Navel, which with its adjacent Vessels after the Exclusion of the *Fætus*, becomes a Ligament. Sometimes the Skin about the Navel in new Born Infants, is observ'd to be too thin, and will rise on a round Knot, as if it had a transparent Liquor in it, but in few Days after their Birth Mr. *Ruysch* has oftentimes observ'd 'em disappear. *To know the Distinction of Sexes in Sceletons* is something difficult, but if we enquire, it is chiefly to be observ'd in that *Chink*, upon the joining together of the Bones of the *Os Pubis*, which is form'd from the Bones of the *Ischium* or *Huckle-Bones*, for these yield more in Women than in Men. But if this Fissure or *Chink* be straiter than ordinary in Women, 'tis to be fear'd they will have great Difficulty in Child-bearing, from which they seldom escape; for this is call'd the Womb Looking Glass, neither is it in this or any other Cases

of other Concern; otherwise to consider the Reason of Distinction of Sexes, we ought to have particular REGARD to that Difference that is in the Ribs, which are broader in Women and straiter in Men; the Circumference of the Rim or Bottom of the Belly is of larger Extent in Women too.

It more commonly happens, that the Neck of the Thigh Bone is broke by some external Violence, than a great many People believe; for the Bones are very slender in this Part, and the *Lamelle* as they are call'd brittle like Glass. And altho' it is a common Opinion, that Patients think the Pain and Loss of Motion proceeds from the Exarticulation or Luxation of the Thigh-Bone, from its Union with the Huckle-Bone, yet that is a false Notion, and impossible that the Articulation can suffer a Luxation, by Reason of the Thickness and Strength of the Ligaments and Circumjacent Tendons. I saw a Fracture and felt it with my Hands, in the Dead Body of a Woman at the Hospital in *Amsterdam*, call'd the *Pest-House*; which in course of Time had consolidated again by a

Callus

Callus in the Neck of the Right Thigh-Bone, yet the Woman was sound, and had the use of the Part to her dying Day. A *Callus* the Breadth of ones Thumb may be under the great Head of the Thigh Bone, but there can be no Hurt or Preternatural Constitution in the Ligaments and Tendons of the Muscles, all Things are so firmly knit together, and the hurt Place, so well consolidated by the *Callus*, that tho' it be us'd with never such Violence, it cannot be broke. Notwithstanding it is not to be deny'd, that the tendons of the Muscles in fractures of that kind, altho' they unite again can bear as much as before, or be able to sustain the usual Motion of the Feet: To say nothing of the Nerves that occur to this Labour, whose chief Heads proceed or issue from the *Os Sacrum*, and the said Parts of the Tendons and Ligaments. Of other Fractures of the Bones in general, Mr. *Ruysch* has observed, that such Men who are in an ill Habit of Body, of a Scorbuck Constitution, or whose Juices are fizy and want those uniting Particles necessary for the Accretion of the Bones, in such Cases

Fractures will never rightly consolidate: He hath seen others, in which the Spongy Part of the Bones, or *Meditullum* adheres, but the external *Laminae* of the Bone not being equally hard, upon every light Occasion is Subject again to *Fractures*: For both of these Evils, he has thought it sufficient to apply Iron plates towards fortifying the weak Parts.

of the Paracentesis. A Paracentesis or Perforation of the *Thorax* or Chest in an *Empyema* is rarely made with the desired Success, because the purulent or corrupted Matter, is enclos'd in a cavernous Bag, and sticks to the *Pleura*, among the *Intercostal Muscles*. Mr. *Ruyssch* thought it expedient, instead of a Penknife or Incision Knife, to apply a Potential Cautery to the Third and Fourth Rib, to be reckon'd from the lowest. The best Cautick for this use is, that made of Quick Lime, and a *Lixivium* of Soap Ashes, form'd into the Consistence of a Stone.

of the Trepan. He advises concerning Trepanning, and informs us, that he always treated the wounded Part with Cephalick Fomentations for Twenty Four Hours, and if in that Time the Symptoms did not

not abate, then at last to proceed to the *Trepan*, which is an Operation ver-
ry Troublesome and Difficult.

The Thirteenth Day of January, we were supplied from the Publick Hospi-
tal with the Body of a Woman, who dy'd in Child-bed, and this was for Information to the Midwives, the Magistrates having order'd, that there should be frequent Dissections of this kind for the Improvement of the Art of Midwifry. But before Mr. *Ruysch*, whose Busines this was, demonstrated the Subject to the Midwives, he show'd us, the most rare Anatomical *Pheno-
mena* of the Parts. The Womb appear'd in Women with Child towards the upward Parts of the *Ileon* and *Jejunum*, and thrusts up the *Liver*, *Stomach* and *Diaphragm* into the *Tho-
rax*, so that it is difficult for them to breathe. The Womb being cut in form of a Cross, appears as thick as it was before the Impregnation, altho' it has admitted of that prodigious spherical Extension, which may seem incredible to those who do not consider the vast swelling of the middle Vascular Tunicle of the Womb, which grows every Day successively with the *Fœtus*. The Tunicles

nicles of the Womb are properly Three; the Outermost is Smooth, the Middle Spongy and full of Blood Vessels, and the Innermost soft and glandulous, to which the After-birth is fixed tho' not very firmly, and these are united to the Membranes in which the *Fætus* is wrapt: Those Two Membranes are the *Chorion*, and the *Amnios*, which at first sight may seem to be but one, and yet with little difficulty may be separated from one another with the Fingers. In this Subject the *Fætus* appear'd just ready for Exclusion, from whence might be observ'd the inward Orifice of the Womb, by a little Dilatation, the largeness or size of this Orifice wou'd at this Time admit Two Fingers. I took particular Notice of the *Placenta* or After-birth, that it was not so grumous and divided, as it seem'd after Extraction from the natural Part, when it had been touch'd by the Midwife's Hands. It is cover'd with a peculiar Membrane, which Mr. *Ruytsch* calls *Succous*, or juicy, with the Membrane of the *Chorion*, and a continued Inosculation of the Substance of the Womb. In the Neck of this Child-bearing Woman, we ob- serv'd

serv'd several gaping Pores about the Orifice of the *Urethra*, with which sometimes unskilful Surgeons are deceiv'd in searching for the Stone, and taking these for the *Urethra*, which Error they may easily rectifie, by knowing that the Orifice of the *Urethra* is situated just a Thumbs breadth from the *Clitoris* in a right Line. It is singular what the famous *Ruysch* has observed concerning *Fallopins* his Tubes; to wit, that in those Women who have lately conceiv'd, that Tube by which the inflam'd Egg pass'd, does appear to have a Cavity conspicuous at its Insulation with the Womb.

As long as the *Fætus* is shut up in the Confines of the Womb, it is difficult to pass a Judgment of Life and Death, which yet is highly requisite, at a Time when the Question arises, Whether the Mother shou'd not be saved, by extracting the Child by force: Neither is there any Sign of the Childs being Dead in the Womb so sure, as that which is taken from the Navel String, for if it be flabby and have lost its Pulsation, you may proceed safely to work, and discharge your Conscience, Mr. *Ruysch* has said,

said, that the Sign of a Dead Child is taken from the Lungs which remain smooth, but if the Body has been Dead sometime and expos'd to the free Air, it shall so change the Structure of the Lungs by a supervening Fermentation, that they shall swim above Water, notwithstanding the Child was dead in the Womb; but if it so happens, that the Child expires in the Neck of the Womb, during that Time it shall not be capable of receiving any Air into the Lungs.

*Of Abortions or Mis-
carriages.*

Before I proceed further with the Dissection, I shall observe to you something of Abortions, which have been procur'd by wicked and vile Prostitutes, some to save their Modesty still pass upon the World for chast Virgins, and others to prevent the Charges of the Prosecution of the Law: For the Love and Value some set upon Reputation and a good Name is so great, that they will sell their Consciences and Religion to purchase that, and a little stoln Pleasure especially in the Acts of Venery, is esteem'd by some Women worth their hazarding both Soul and Body for in this World. What a vast number of Souls perish

by

England and Holland.

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by the Artifices of Poyson, and other foul Practices to destroy the *Embrio's*, it may be after Three or Four Months being gone with Child: But if it happens, that thro' Ignorance or imprudent Negligence, they go out their whole Time and bear a Child alive, what Machinations and Devices are there made to thrust it out of the World, and what they cou'd not effect before the Birth with Craft, they make up afterwards with Cruelty. I tremble when I call to Mind, what *Patinus* who was an incomparable Philosopher and Physician, has said in some Letters of his writ in the *French Tongue*. A Letter to Mr. *Falconet*, 1660. the 27th of *July*, and another Printed at *Paris* in the Year 1692. Where he takes Notice of a Midwife, who in his Time had her publick Punishment suspended, tho' she had killed a *Fætus* by Perforating the Womb of a certain Woman by an Instrument to procure Abortion, or a Miscarriage, but with such unhappy Success, that the Mother being seiz'd with Convulsions, expir'd in a great deal of Miserie. This wicked Midwife in her Confession before the Criminal Judge, own'd,

own'd, that she had by this Method successfully procur'd Abortions in many Women. But *Patinus* as a diligent Reader of the Sacred as well as Prophane History, proves from *Tertullian*, that the way of strangling of Children in the Womb, was practic'd many Ages ago; the Place he refers to, is in his Book of the Soul, where he quotes the Words of the Father. But I am deceived, if either the other Authors he quotes, or *Tertullian* himself explains it better than *Ovid* in his Elegy of Love, Book the 2d beginning at the 14th Line, and so on.

Quid Juvat immunes belli cessare Puellas
 Nec fera Peltatas agmina velle sequi;
 Si sine Marte suis Patiuntur Vulnera te-
 lis,
 Et Cœcas armant, in sua fata manus?
 Quæ prima instituit teneros convellere
 (fœtus,
 Militia fuerat digna perire sua.
 Scilicet, ut careat rugarum crimine ven-
 ter,
 Sternetur pugnae tristis arena tuæ.

And a little further.

Vestra

*Vestra quid effoditis subjectis Viscera te-
(lis :
Et nondum natis, dira venena datis.*

So on

*Dicite quis Terens, quis vos irriter Jason
Figere sollicita corpora vestra manu ?
Hoc neque in Armeniis tigres fecere late-
(bris :
Perdere nec fatus ausa leæna suos.
At teneræ faciunt, sed non impune Puella,
Sepe suos uto quo necat, ipsa perit,
&c.*

Upon another Occasion, Mr. *Ruyssch* of *Blood-letting*.
form'd a demonstrative Discourse up-
on Blood-letting : It is observable,
that the most common Places to take
Blood are in the Cephalick, Basilick
or middle Veins of the Arm : The Ce-
phalick or Head Vein is seated on the
out-side, as the Basilick is on the in-
side of the Arm. But where these
Two Veins meet by the *Anastomosis* of
their Trunks, which is below the bend-
ing of the Arm, there the Middle Vein
arises ; which is not so commonly
Cut, as the ignorant Vulgar think, for
some-

sometimes it is hid under the Muscles; but the Cephalick is most commonly Cut, or a Branch of it, in the bending of the Arm, or a little above, for the Basilick or as it is call'd by some the Hepatick is more dangerous to Cut, by reason of its adjacent Nerves, or the tendinous Part that lies under it, which forms the Muscle call'd the *Biceps*, being the first Muscle of the *Cubitus*, and being wounded produces grievous Symptoms.

In the Demonstration of the Parts serving for the Secretion of Urine, and the use of the Bladder, he propos'd a curious and choice Observation of the falling down of the Bladder into the *Scrotum* or *Cod*, which he solemnly attested, he had met with twice in his Practice. And that the Bladder descended the same way into the *Scrotum*, that the Guts us'd to do, in a Rupture, and that the most certain Sign of this Effect was, when the Party cou'd not make Water without squeezing the upper Parts towards the *Scrotum*.

*Character
of Mr. Raw.* These were the Things which I took Notice of from the famous Mr. *Ruyssch's* own Mouth in his Lectures and

and Observations that he made to his Scholars. I shall now speak of another Master of mine, Mr. Joh. Jacob Raw an Ornament and Glory to his Country, a most incomparable Anatomist and Surgeon, who in his Judgment and Experience in Cutting, may be allow'd even to excel the dextrous and diligent *Vesalius*. I pursued the Directions and Precepts of this extraordinary Man, near Five Months in Anatomy and Surgery. Therefore what I shall communicate are the Observations of that finish'd and compleat Anatomist, and those Things which appear'd most remarkable from his Institutions and Instructions. There are abundance of other Things which that eminent Anatomist might do, to expose the Cheats and Errors that Pretenders to Anatomy make use of, if he wou'd publish them, they wou'd contribute to the Admiration of all, as well as the Health of many Thousands, and the Honour as well as Proficiency of the Art. But if these trifling Lucubrations of mine, and this little Essay of Anatomy should come before so considerable an Anatomist, I hope he will not judge hardly of me, that I

have not been ashame'd to publish some particular Thoughts and Notions of his. But I solemnly protest, I do this out of a publick Esteem, that the Students of Anatomy may see the Tracks and Footsteps of Anatomy truly taught, that which is really Natural, and not that which is daub'd or gilded over with false Colours by such Anatomists, as have got a Reputation without deserving it, but impose upon their Scholars or Disciples for want of a true Foundation of solid Experience and Observation.

Of the lower Jaw-bone.

Mr. Raw has made an excellent Discovery of the true Seat of the Articulation of the lower Jaw-bone with the upper, in a Skeleton: For this has been a constant Error in all Skeletons, and natural Draughts; the lower Jaw-bone seeming to be Articulated in that Place, where the Clinoide Cavity meets with the inside of the Bones of the Temples great part of, which in a living Subject is almost always replete with Fat, and the space gives way or yields to the uniting *Apophyses*, but in Motion especially, to wit, that the lower Jaw-bone might move backward without Impediment: But the true place

place of the Articulation is near the *Zygomatick Process*, or Jugal-bone about the Temples in a transverse Eminency, to which the Cartilage intervening, we may plainly see the lower Jaw-bone articulated: But if from a fall or other Accident the lower Jaw be disjointed, then it may be, that almost all the *Condyloide* or uniting Process sinks into the *Clinoid* Cavity: But this happens only in a preternatural State, and then the Man is hinder'd from Chewing, except by the Assistance of a dextrous Surgeon, the lower Jaw-bone be stretch'd out, and reduced to its former Place.

Of the *Maxillary* Bone properly so of the upper call'd, or the Upper Jaw-bone which is a little straiter than the other, and has an Orifice opening into the Nostrils: He has assign'd the same use to this *Sinus* or Duct, as to the *Frontal* and *Sphenoide* Ducts, not in the first Place, as those are made to form the sound of the Tone, but in the second Place, to serve for restoring the Mucous to the Nostrils; for the said *Sinus* are indeed nothing else, but Receptacles for the Mucous of the Nose, so that there may be Plenty of that at

all Times, which flowing every where from hence in whatever Position the Head is plac'd, it may sufficiently water the Pituite Membrane, investing the little Cells of the Spongy Bones. It is worth Observation to take Notice, that the Smell wou'd not be maintain'd by the Inspiration and Expiration of the Air only, which wou'd render the Parts too dry, without a continued Flux of this Humour, which preserves the Passages moist, and so the Impressions are render'd agreeable to the smelling Organs by the Air, which may affect the Nerves in a due manner. From hence it appears, there is such an Expansion of the pituite Membrane in a little space, for it invests all the foresaid Sinusses and Spongy Cells of the Bones, that the Particles of Odours convey'd through the Air, may touch 'em in a larger Superficies. And this is the reason, that the Scent of Things remain with us sometimes after the Subject is remov'd, when some small Particles of the Odours get in among the Interstices or Chinks of the Cells. Hence it is, that some Animals who have larger Cells, have

have their Smell more perfect and lasting, as is evident in Dogs.

The Lower Spongy Bones of the Nose, which by the *Moderns* are said to be the *Apophyses* of the *Maxillaries*; Mr. *Raw* has determined to be a single Pair of Bones of the Upper Jaw. For the Nostrils in grown Persons may be separated by a skilful Hand, from the Bone of the *Ethmoide Process*, or that sieve-like Bone in the inner Part of the Nose full of little Holes, to receive the serous and pituitous Humours from the soft pappy Processes of the Brain, and those Bones in the Nostrils are so easily divided, and fall of their own accord; that in several Sculls in Church-yards and Charnel-houses, they are wanting.

You will find a great Disagreement of the *Foramina* of the *Scull*, among Anatomists about the *Foramina*, or Holes that occur for the Transmission of the Nerves in the *Scull*. The best Method that appears to me is, that of my Master *Raw* who in his *Osteology*, does not as others make 'em, reckon the *Foramina* of the *Scull* peculiar or singular to each Bone, but after his Description of all the Bones of the Head, he proceeds so, that he

takes Notice of every particular Bone, according to its natural *Compagies or Construction*. For the *Foramina* are compos'd sometimes of many Bones together, from whence they have vainly imagin'd to divide 'em into singular or distinct Bones. He reckons Ten internal *Foramina* of the Scull, beginning from those which are form'd for the Olfactory Nerves: By the Second *Foramen* passes the best or choicest pair of Nerves. The Third *Foramen* which is an unequal one serves for four Pair, viz. The Mover of the Eyes, the Pathetick Pair, the Passions; the first Ophthalmick Branch of the Fifth Pair; the Sixth Pair of Nerves for governing the Muscles of the Eyes, which others call *Timidum*. The Fourth *Foramen* transmits the Second Branch of the Sixth Pair that runs to the Upper Jaw. The Fifth *Foramen* from the Third Branch of the Fifth Pair serves the Lower Jaw. By the Sixth *Foramen* enters a Branch of the Artery, springing from the external Carotide Trunk. The Seventh *Foramen* admits the Internal Carotide, by the Eighth *Foramen* enters the Seventh Pair of Nerves, call'd the *Auditory*.

The

The Ninth is form'd for the Reception of the Eighth Pair of Nerves, call'd the *Vagum*. The Tenth which is often double with the Ninth Pair, is call'd *Linguale*, or the Pair of Nerves belonging to the Tongue. To these belong the greatest *Foramen* of the Scull, by which the *Medulla oblongata*, the Tenth Pair likewise, the Arteries of the *Vertebræ* and *Willis's* Spinal Nerves all Issue forth. You may see what a Distribution of Nerves Mr. *Raw* makes: He reckons *Willis's* Pairs of Nerves, not to be Ten but barely Nine, because the last Pair which *Willis* calls his Tenth, rather has Relation to the Neck, and therefore rightly calls that Pair, the first Pair of Nerves of the Neck, because he has observ'd them to proceed from the first and second *Vertebræ* of the Neck.

Of the Eleventh Pair of Nerves of the Brain, which Mr. *Bidloo* reckons with the other Nerves of the Brain, and with the utmost Injustice to *Galen*, attributes the Invention to himself; Mr. *Raw* is of this Opinion, that it is true, that the said Nerve proceeds out of the Bones of the Scull, as has been very well known, but that

A Journey into

it comes out of one and the same *Foramen*, with the eighth Pair, leaving the same in the Muscle call'd the *Trapezium*, resembling a Monks Cowl: But because this Nerve is not of the Substance of the Brain, for as much as it is contain'd in the Bones of the Scull, it proceeds from the Spinal Marrow, arising betwixt the Second and Third *Vertebræ*, and absurdly referr'd by *Bidloo*, to the Nerves of the Scull, but rightly call'd by *Galen* formerly the Nerve on the side of the *Medulla Oblongata*: Thus much of the Head; I shall now say something of the Limbs, which Mr. *Raw* communicated to us; and first of the *Carpus* or *Wrist*, with its due Disposition as it appears in the *Sceleton*. The most remarkable Articulation of this, and the Union appears so difficult, that those Anatomists who understand the Osteology in the *Sceleton*, observe this Part presently, which if it is not dispos'd in due Order and Form, the dexterity and solid Knowledge of the Anatomical Artificer is soon discover'd, more than in the whiteness of the Bones and other Trifles esteem'd by the Ignorant, Therefore he show'd us, how to dispose

pose the Bones of the *Carpus* after this manner: The *Carpus* or *Wrist* has eight Bones, whose Position by reason of their Irregularity we cannot describe, but they make a double Joint or Articulation, one with the *Radius* and *Ulna*, the other among themselves, which is made thus: The Fourth little Bone of the first Order scarce makes any thing to the Articulation, but the Superior only adheres to the little inferior Bone of the Three small Bones of the first Order, and receive the Tendon of the Muscle of the internal bender of the Wrist: These Three little Bones of the upper Part or first Order, join'd by a close *Diarrhosis* forms the Superiour Head, which is articulated for the most Part with the *Radius* and *Ulna*, making below a Cavity, which receives the form'd Head from the Two little Bones of the second Order. So that you may see there is a double Order of these Bones, for the first Order has four little Bones, the second as many, and there is a double Articulation, one with the *Radius* and *Ulna*, the other with the three little Bones of the first Order; besides the Order is to be so dispos'd of

of these little Bones below, that you may leave a deep Cavity for the commodious Passage of the bending Tendons of the Fingers, Nerves and Arteries which belong to the inward Part of the Hand.

Of the Teeth from Mr. Raw. The famous Mr. Raw observ'd something to us of great Curiosity as well as use, concerning the Generation of the Teeth. *Kirkringius* sometime ago, put forth a Piece of the Generation of the Bones of a *Fetus*, writ with wonderful diligence and accuracy of Judgment; but that which is strange, there is nothing to be met with concerning the Teeth or their Generation. Our Anatomist discours'd of this thing to us, with singular Perspicuity and Care after this manner: He said it was admirable, that the Seeds of all the Teeth shou'd lie hid in the Sockets of the Gums or Jaws, and that as many Seeds as lay there Latent, so many Teeth a Man shou'd have in his Life; and that he cou'd demonstrate to the Eye these Seeds that were hid in the Gums of a New-born Child. That every *Fetus* contains the Seeds of the compleat number of Teeth which he is to have, and which are fifty Two; for be-

besides Thirty Two Teeth which every perfect Man has, there are the foot-steps or tracts of Twice Twenty more to be found in every Infant. For Nature, has so appointed that there shou'd be eight Cutters, four Dog Teeth and eight Grinders, which fall or drop out about the 6, 7, or 10th Year of Age, to be restor'd by those that lie hid in the Gums, and are to supply their Places, there is a necessity for the first to fall out, because the Substance of the next are to be harder and more Compact, than that of the Jaws. What is further remarkable as to the structure of the Teeth is, that the internal Cavity of the Teeth compar'd with the Membrane that invests the External Root, is much the same as the Internal and External *Periosteum* of the Bones. And this Mr. Raw demonstrated to us in cutting a Tooth length-ways that was filled with Wax, which filling of the Vessels might likewise be done without Wax, from the Blood it self for Example-sake, if the Jugular Veins of a Dog were bound.

In *Myology*, or a Description of the ^{of the} Muscles; Mr. Raws Observation, is very well worth our Notice, concerning

ing the extending Muscles of the Neck, Back and *Lumbares*: For when most Anatomists call the Extenders of the Neck Two, *Tranverse* and *Spinal*, those of the Back and *Lumbares* Three, with various Names, the *Sacrum* or *Sacro-Lumbarem*, the *Longissimum Dorsi*, and *Semi Spinosum*. Mr. Raw only admits of one Pair of Muscles which extends the Neck, Back and Loins, as far as the Articulation admits of this Pair, arises partly Tendinous and partly Carnous in its beginning, from the Posterior and Superior Part of the *Os Sacrum*, and seated betwixt the Cavity which is made from the Spinal *Apophysis* of all the *Vertebrae*, and the Posterior Part of the Ribs, it produces a vast number of Tendons, which are as it were implanted in the Spinal and *Transverse Apophyses*.

All the Tendons of the Muscles of the Fingers, Hands and Feet, have a *Vagina* or Bag form'd of their own proper Substance. In these Bags are always a Liquor, which is by Nature the same with that Liquor, which is collected and found in the Articulation of the Joints. Of the Common Muscles of the Thigh and Leg, there are

are broad spread Membranes, which many have taken for the Muscle call'd the *Abducens*, but upon accurate Dissection it has been found only to be a Skinny Muscle, firmly binding the other Muscles subject to it, this does not properly move the Bone, because there is little or nothing inserted to it.

The Muscles of the *Pharynx* or upper Part of the *Gullet*, which by the most curious are reckon'd five Pair, are only Three nicely speaking, to wit, Two which dilate the Gullet call'd *Stylo-Pharyngei*; and one which deserves to be call'd the *Sphincter* of the Gullet, from constringing it. From this *Sphincter* the over wise have made Two Pair of Muscles, call'd the *Pterigo-Pharyngæus* and the *Thyro-Pharyngæus*.

In the Shoulder the *Rotundus Minor*, and *Infra Spinatus* make but one Muscle. It is to be observ'd in the Muscles of the *Cubitus*, that the *Longum*, *Brevem*, and *Brachialeum Externum* only constitutes one Muscle, which has a Triple Head, but one moving Point. The *Anconæus* is nothing else but a thrusting out or Protrusion of the other *Extensors* of the *Cubitus*.

You'll

You'll find among few Authors any mention made of the Muscles of the *Clitoris*, or at least a very obscure Description, but I shall give you a more accurate Account of the same from the Dissection of a Girl of Seventeen Years of Age; there are Two Muscles of the *Clitoris*, one on each side, which adhere to the *Os Pubis* on the inward side below, the Extremities of 'em running on both sides with their Fibres, involv'd in Two nervous Bodies constituting or forming the *Clitoris*, which is nothing else but the end of those Two Muscles ending in Two nervous Bodies, the *Cuticula* or skinny Part being constantly hid by the *Nymphæ*, tho' it appears with many Nipples, like that of the Glands of the *Nymphæ*. The use of these Muscles is to close or tie up the Vessels of the nervous Bodies, and to hinder the return of Blood; from whence by the Arterial Influx of Blood the little nervous Bodies swell, erecting the *Clitoris* and tying or binding round that Membrane, so that the hanging nervous Nipples become more turgid, and thereby they nicely distinguish the smallest Titillations, and the Venereal

Plea-

Pleasure is increased. The more salacious Females, by this Contraction of the Vessels and lascivious Titillation of the Glandules, are wont to throw out a profuse quantity of Liquor, which they commonly call Seed.

Thus much for the *Clitoris*, which upon Occasion, and by reason of the Knowledge of this Subject, some in Conversation will affirm, that they know the true Signs of Virginity. But from the following Account of the Spermatick Vessels, and what relate thereto it will appear from Mr. Raw, that the *Hymen* is rarely found in grown Persons, from the too great Curiosity of the Sex, and their untimely Lechery, so that it may seem a Paradox, not of little difficulty to determine the true *Diagnosis* or Signs of an Adult Person, whether she has bore a Child, or had a Miscarriage, from one that never had either. But there are several Women, who have contracted foldings or wrinkles in the Rim of the Belly, especially lean Phlegmatick Persons, upon the first Child, altho' you cannot come to examine strictly into the other Signs of their Virginity, who can scarce escape a just Suspicion of

of having had Children before, by the unskilful Vulgar. Not that I shall excuse the Artifices us'd by some Wanton Ladies, by which means they swath their Bellies, and use other proper Means after Delivery to render the Parts round and smooth ; tho' there are other Causes than that of Conception to make the Belly furrow'd and wrinkled, which do not permit us to censure them for the loss of Virginity ; for what if the Belly shou'd prove wrinkled upon an *Ascites*, Dropsie of the Womb or other the like unhappy Effect ? Wou'd it not be the greatest Injury to such to judge they were Whores without further Inquiry : Therefore since a wrinkled Belly is not sufficient to prove their having had Children, so it is too trivial an enquiry to assert the contrary ; there ought to be other more certain *Phænomena* or Appearances, to induce us to pass a clear Judgment upon the Matter. These Things are to be found, partly from external Causes, and partly from the internal Parts of the Women : And in the Externals, we must enquire into the Part call'd by the Greek Anatomists, *Σχισμα μεγα*, the great Fissure or

or Chink, by the Inspection of which a more certain Judgment may be made of the having had Children: For the Aperture of this, which by Anatomists are call'd the Lips, that Part which lies towards the *Anus* is more strict and sticks closer together in those who have not yet known a Man, so that the space betwixt the Lips and the *Anus* call'd the *Perineum* is broader and larger, but the Fissure it self especially towards the Gut, straiter and more united. This strictness of the Bridle of the Lips by the Passage of the *Fætus* in Child-bearing is considerably relax'd, and the Fissure it self for that reason towards the *Anus* not a little dilated, neither will it afterwards return to its Pristine Texture again.

As to the internal Parts. We ought to examine the foldings of the Orifice of the *Vaginae* or Neck of the Womb, call'd by some the *Carunculae Myrtiformes*, or Myrtle-berried Caruncles, which by a great many are believ'd to be the Remains of the *Hymen* after deflouring: These make the said Orifice of the *Vaginae* straiter by their wrinkled Foldings, and by their turgid and uneven Swelling, so that in these

wicked Days, they are by most People taken for the *Hymen* or *Virginity* it self; neither is it to be imagined, that in those Girls who now and then use a Man, the Virgin Pleasure is altogether wanting; for if they are healthful and of a good Constitution not too Phlegmatick and Spongy, the closeness of the Orifice, and the swelling of the Caruncles will be maintain'd sufficiently entire, to take no Notice of the Arts us'd to constringe the Parts, and render the Passages straiter, by the warm lascivious Nymphs, who make it their Study to attract Men to their Venereal Embraces. But the Matter will be quite otherways in those who have had but one Child, for in these the unevenness and wrinkles of the glandulous and membranous Parts, those grateful Inducements to Venery are so obliterated or worn smooth, that there are scarce any remains left of their having been otherwise, which has also been the reason, that those Foldings or Wrinkles have been taken for Caruncles or fleshy Swellings, which *De Graef* that curious Enquirer into the Organs of the fair Sex, will not allow of by any Means.

So much for the Signs of Child-bearing, which ought not to be esteem'd a superfluous Speculation, because they have been found so difficult at all Times, as well as those of Virginity; as is attested by the Learned *Horace Eugene* formerly Chief Physician to the Duke of Savoy, who says in his 1st Epistle Tom. the 2d. Chapter the 5th in the Folio Edition, Printed at *Francfort* 1597. *Sex probatæ famæ & peritiae obstetricis Juvenculam quandam judicasse Virginem intactam, quæ septem ante mensibus puerum ppererat.* Six Midwives of approv'd Skill and Reputation, adjudged a Young Girl to be a pure Virgin untouched by Man, that had brought forth a Boy seven Months before.

Our Anatomist speaking concerning *The Circle about the Nipple in the Breast*, says it is made up of the finer Part of the *Cutis*, but has a firmer and more Compact Texture than any other Part of the Skin, least the continued Force of the Infant beating against the Circle in sucking, shou'd easily hurt it. For we may see in other Parts of the Body, if we suck the Skin it will instantly grow Red. From the

A Journey into

Description of the Glands, you have
as follows.

Of the
Glands of
the Head.

There are Eight greater Glands, which are found in a Humane Head; the Two *Parotides*, Two under the Jaws, Two under the Tongue, and those call'd the Almond Glands. All which are compos'd of a large Number of other Glands, whose distinct Orifices we may easily see with our Eyes. The *Parotides* empty their *Lympha* by *Steno's Duct* into the Jaws, perforating the Trumpet Muscle which is round upon the Cheeks like a Circle near the Third grinding Tooth, from the Dog-teeth of the Upper Jaw-bone.

The Glands under the Jaws and those under the Tongue, which *Placentinus* described long before *Wharton*, empty their *Lympha* by one and the same Duct under the Tongue, near the Bridle and Frog-Veins. *Nuck* has a new Gland under the lower Eye-lid, which he assigns for carrying of a watry Humour in the Eyes, which being suppos'd to rise from the Brain, is all Fiction and *Chimera*.

During the Time we continued our Anatomical Exercises a Controversie

was

was maintain'd, betwixt Dr. Phil. Ver- *A Dispute
beyen of Louvain, and Dr. Godfrey about the
Bidloo of Leyden, both Anatomists of mus.
their several Universities, concerning
the Gland *Thymus*, which is seated in
the Throat for separating the *Lympa*
from the Blood, and emptying it by
the Lymphatick Vessels; the Argu-
ments of this Dispute, and the Writ-
tings upon 'em on each side were pub-
lickly Printed. From this Controver-
sie, rises an Occasion for us to examine
this Gland more nicely, together with
its Situation in a New-born Child:
And we found it sticking under the
Throat, as well in the superior and
anterior Cavity of the Breast under
the *Os Sternum*, it joins to the *Me-
diastinum* (which divides the Lungs
and other *Viscera* of the *Thorax* into
Two Parts) by means of a fine fatty
Membrane, which may be compar'd to
that of the *Caul*. It touches the *Vena
Cava* in its superior Trunk, the whole
Aorta, before it winds it self into an
Angle, and Part of the beginning of
the *Pulmonary Artery*, as far as it is vi-
sible out of the *Pericardium*. It touch-
es lightly upon these Vessels by the In-
tervention of the foresaid Membrane,*

so that you may reach it with your Fingers. And particularly it is to be observ'd, contrary to that Jejune Description of Mr. Bidloo, concerning the Situation of the *Thymus*, that the upper Part of it touches the first Division of the superior Trunk of the *Vena Cava*, but not one of the Three Branches from the Angle of the *Aorta*, but the lower Part of this Gland is found upon the *Pericardium*, even to the middle of the Heart, and adheres to the *Pericardium* by means of the foresaid loose Membrane. The particular use of this Gland, is without all doubt for Assistance to the larger Vessels: But when it swells in Infants, and the *Fetus* with a milky chylous Juice, which after the *Fetus* is born, sensibly diminishes, it must appear altogether to be design'd for the Nutrition of the *Fetus* in the Womb, but for what reason we do not yet know.

Mr. Raw's Angiology. Mr. Raw first observ'd in his *Angiology*, or Description of the Vessels, that the great *lienterick* Branch of the *Venæ Portæ*, where the *Pancreas* joins to it, sends forth Seven, Eight, and sometimes Ten or more Branches according to the length of the Duct:

The

The Veins having inwardly membranous Productions, call'd *Valves*, Two whereof always Correspond as to Height and Situation; not having that use as many Author's wou'd have 'em, to further the Motion of the Blood in the Veins, for this the very Laws of Circulation can effect, altho' the Veins be far distant from the Heart, and scarce feel its Impulse. For another reason also, we shall not assign *Valves* peculiar to all the Veins, but to the *Cava* only and its Branchings, that in every Syftole of the Heart, the Venal Blood might at that moment be stopt, lest too great a weight might hinder the Admission or Entrance of the Arterial Blood into the Veins. Besides we see in the lower Parts, the *Valves* always apposite to the Orifice of the Branching Veins, that so the Blood entering by those Orifices and the larger Ducts of the Veins, might be received as it were by so many divided Channels, least the protruded Blood break, and interrupt the light Motion of the Vital Stream in the larger Veins on both sides. But it is to be observed still, in the great lower Branch of the *Cava*, and the superior

Trunk before it makes Two, that there are scarce any *Valves* to be found. But if there are any fine subtle Membranes, produced in these larger Trunks next to the Heart, they are seldom able to resist the impetuous Motion of the Blood from the *Systole* of the Heart; for which reason they are rather found in those Vessels, wherein the *Impetus* or Force is sensibly remitted. On the contrary, the *Vena Porta* ought to have no *Valves*, by reason that Pressure in the *Systole* of the Heart, cannot be exercis'd in the Blood of the *Porta*: For the upper Part of the *Porta* does the Duty of an Artery, by receiving the Blood into its inward Part, and distributing it thro' the Liver; hence it has rather the Texture and make of an Artery, than a Vein.

What I have observ'd in the opening of Dead Bodies, as to the Situation of the Parts in General and their Connexion; I shall communicate to you in short, upon the Cutting open the Belly, as it is known, the Guts appear first in View, which are so dispos'd in their natural Situation, that the *Jejunum* or hungry Gut fills the Region above the Navel, but the *Ileum* that

that below the Navel, so that these took up the greatest Part of the Cavity of the *Pelvis*, or bottom of the Belly: The *Colon* lay hid in the lower Part, and in a crooked Sigmoide Figure from the Right hollow of the *Ileum*, just to the *Intestinum Rectum*, or strait Gut: The *Duodenum* lay buried in the left side under the *Jejunum*. The *Liver* occupied the whole Breadth of the upper Part of the *Abdomen* under the *Diaphragm*, so that a much greater Part lay on the Right-side, than on the Left, because there must be some room left for the *Spleen*, but the *Stomach* seems to be almost entirely hid under the *Liver*, and is fasten'd to the *Spleen* by the *Vas Breve*, over these the *Omentum* or *Caul* extends it self, which is not perforate any where, but adheres to the *Colon* with Two Folds, and is fasten'd otherwise singly to the *Stomach*, the *Spleen*, and the *Duodenum*. The *Urinary Bladder* to the inside is only united by Fat, but on the other side lies in the *Hypogastria* or lower Cavity, that the Stone might be cut from thence with less Trouble and Difficulty: But because of the Fat, the Bladder wounded in these Parts can never

never knit or heal again with the *Peritoneum*, but the Urine must fall into the Cavity of the *Abdomen* with deadly Danger. The *Intestinum Rectum* particularly its *Sphincter*, appears to be entirely buried in Fat, which is not only of extraordinary use in expelling the hard *Feces*, but is eminently serviceable in a difficult Labour, to wit, that it might yield or give way to the Birth, which can scarce be done, if the carious Fibres of the Muscles of the Neck of the Womb, lie adjacent or next to 'em. On the other Hand, this Fat in a preternatural State, contributes much to the Generation of *Fistula's in the Anus*.

In opening the *Thorax* or *Chest*, the first Thing that comes in view is the *Mediastinum* or Partition: Which is nothing else but a doubling or Continuation of the Membrane of the *Pleura*, and make Two Bags on both sides, from whence it is plain, from what reason a particular Dropsie may attend this Part, which *Hippocrates* takes notice of. The Eighth Pair of Nerves, or *Par Vagum* is dilated thro' the Neck into the Breast, and being held up by the Parts adjacent, falls into the *Pericardium*.

cardium, Lungs, &c. but the *Intercostal Branch* is presently fix'd to the *Vertebræ* of the Back.

In the Anatomizing of a Young Man of about 16 Years of Age, Mr. Rawgia, or a Description of the Genital Vessels. *Splagnologia*, 1st. The *Seminal Vesicles*, the *Vasa Deferentia*, and the Veins of the Testicles. The *Seminal Vesicles* are firmly united to the *Urinary Bladder* about the *Sphincter*, and the *Sphincter* seems to contribute to the Excretion of the Seed in Coition, altho' those Vesicles have muscular and carious Fibres, which first of all irritate them.

The *Vasa Deferentia*, as to the outward appearance of their *Vesicles* are plac'd among the *Ureters*, which are expressed by the Figure X. contrary to the Anatomical Observations of *Lealis* in the Works of the Learned, Printed at *Leipsick*, in the Year 1687. p. 229. Where he takes notice, that the *Vasa Deferentia* terminate not in One common Duct, but in Two plainly distinct ones close united with each other, adjoining to the *Urethra*, which he demonstrated to the Eye by blowing them up with a Pipe: The same

Au-

Author has ill describ'd the *Vasa Diferentia*, where they are so dispos'd as to form the *Epididymis* of the Stones, which are winding Vessels, that may be easily separated with the Fingers; but on the other Hand, by the frequent occurring of the *Anastomosis*, we may see them in the prepar'd Vessels, when fill'd with Wax.

Those who deny the returning Veins from the Testicles are foolish; for by Injection with red Wax they may be demonstrated to the Eye, in a sufficient Quantity and Number; from which Experiment we may clearly discern the Veins, which are for the Nutrition of the *Vasa Diferentia*. The Substance of the Stones is compos'd of meer Capillary Vessels, which Vessels are sustain'd by the Membranes from the *Albuginea*, or that Skin which immediately contains the Testicle; as for Example, we see the *Pia Mater* made in the Brain. For those Extremities of the Capillary Vessels are not only from Veins and Arteries, but likewise from the *Vasa Diferentia*: These Vessels are upheld by the form of the *Albuginea*, lest they shou'd be squeez'd or disturb'd, and so the Separation of the Seed is made.

If

If one Testicle only appears in a Man, the other oftentimes is hid in the *Abdomen* or *Belly*, and by some unskilful Surgeons, sometimes is taken for a *Bubonocele* or *Rupture*, when the *Intestines* fall into the *Groin*. The internal Membrane of the *Urethra*, is the Production of the internal Membrane of the tendinous Part of the *Bladder*, and so the Reins have a *Gland* instead of a *Skin*, hence comes the greatest Pain after Cutting for the *Stone*, by means of the Consent of the *Glans* of the *Yard*.

Mr. Raw compares the *Vasa Diferentia*, and *Seminal Vesicles* with the *Hepatick Duct* and *Gall Bladder*, for as we see all the super-abounding Bile or *Gall* excern'd out of the *Hepatick Duct* return'd into the *Gall-Bladder*: So in like manner all the Seed that is brought from the *Vasa Diferentia* regurgitates or flows back into the *Vesicles*, and then at last from those Two *Vesicles* by their distinct Canals is cast into the *Urethra*, in the *Act of Venereal Coition*.

Among the Preparations of Womens *Observation* for Midwives and Surgeons. Organs, he observ'd to us the follow-ing Particulars, concerning the *Sinus* of

of Women observ'd by the Ancients; The Knowledge of this *Sinus*, (which is observed after the Caruncles call'd the *Myrtiformes*, and in the Neck of the Womb under the *Os Pubis*, and in those who have only bore one Child will easily admit of ones Fist) is of great use in the Delivery of the Birth: For then the Hand of the Surgeon or Midwife, except applied betwixt the prominent Parts of the Infant, and this *Sinus* which is under the *Os Pubis*, is of no use: For the space here affords sufficient room for the turning of the Hand, giving way in the mean Time for the Parts of the *Fætus* pressing to the Birth upon the *Os Coccyx* or Rump-Bone.

After a difficult Delivery, and the use of the Hook to draw away the Child, a deadly *Hæmorrhage* or flux of Blood often succeeds; and indeed from this Cause, because the *After-birth* being separated from the dead Child, the Womb by reason of the Substance of the *After-birth* remaining behind, cannot close its Orifice as it ought to do; for by such Construction, otherwise these Mouths of those Vessels which discharge Blood wou'd be shut up.

The

The First of March, I who am the Author of this Relation, and one Mr. Wickham an Englishman, made an Experiment, of the Aperture or *Hiatus* of the *Tympanum* or Drum of the Ear, which was invented by *Rivinus* Professor at *Leipsick*, by emitting Quick-silver thro' *Eustachius*'s Tube, which immediately flow'd by the Drum of the Ear out at the Auditory Passage, but the Place where it particularly issued out we cou'd not distinguish. Mr. *Raw*, who was present at the Experiment, thought that the *Mercury* work'd it self thro' the Pores of the Membrane by means of its weight, as we may see it do thro' Leather, &c. and he told us, he had seen such a Percolation of *Mercury*, thro' the Membranes of the Urinary Bladder it self. This Experiment of ours was made upon the dead Body of a Young Fellow of about Sixteen Years of Age.

The following Chyrurgical Operations I saw perform'd upon Live Subjects at *Amsterdam*, partly, by the never too much to be commended and celebrated Surgeon Mr. *Raw*, partly by Mr. *Peter Adriansen* and Mr. *Boeckle-mann* Eminent Surgeons of the same Place.

*The Method
of searching
for the Stone
in the Blad-
der* **The Twenty First of January 1707**
there came a Boy to Mr. Raw, from
Village call'd *Cromenick*, of about Six-
teen Years Old with an incontinence
of Urine, and labouring under griev-
ous Pains in the *Hypogastrick Region* ;
these were Signs of a Stone, of which
that our Master might be sure, he ex-
amined him after the following Man-
ner. Laying the Boy upon the Ground
on his Back, he supported his *Tars*
upright with soft Rags, and thrust his
crooked *Catheter* which he us'd for
that Purpose into his *Urethra*, first
moistening it with *Oyl*, but he put
the crooked Part of the *Catheter*, first
up towards the *Perineum* or *Anus*,
just till he came to the *Os Pubis*, which
then he turn'd upwards, and then pen-
etrated into the Bladder. He then
gave us sufficient Knowledge how to
manage the *Catheter*, and discov-
whether there was a Stone ; which we
sensibly understood from the Motion
of the *Catheter*, that in this Subject
there was a Stone sufficiently large to
Cut ; and accordingly he determin'd
to make a Section the *March* follow-
ing, because he was willing to have
the Cold of the Winter past ; but

the Interim, he advis'd the Patient to drink warm Milk constantly, instead of his ordinary Drink. The Cause why this young Fellow could not hold his Water, was from the Size of the Stone continually pressing on the Neck of his Bladder, so that the Contraction of the Bladder never ceased, and consequently a voluntary Emission must follow. I was not willing to pass by this Examination of the Stone, knowing it is not a little commendable for a Surgeon to be Dextrous in searching for and discovering the Stone, neither are all so delicate in the Management of their *Catheter*.

The Seventeenth Day of *February*, *Lithotomy*
1707. I and Mr. *Wickham* aforesaid, ^{or Cutting} _{for the} went with our Master *Raw* to *Crome-Stone*.
nic, a Village near *Harlem*, where the Boy was to be Cut; which was done in the Presence of Two Surgeons and Burghers of the said Town. After the Body was dispos'd in a proper Posture with the Arms bound, and the Posteriori laid higher than the Head, and the Feet so tied, that the Part to be Cut cou'd not be moved: Mr. *Raw* Kneeling with one Knee upon the Table, sets himself directly be-

fore the Patient, thrusting in a common *Catheter* moisten'd with Oyl into the Yard, at last meeting with the Stone, he withdraws that and puts in another *Catheter*, so deep that he might feel it upon the *Perineum* with his Fingers, then he makes an Incision in the Left-side of the *Perineum*, Four Fingers breadth from the Tuberosity of the *Os Ischium* or Huckle Bone, and a Fingers breadth from the *Anus*, which Place of Incision the *Catheter* depresses towards the *Perineum*. His Incision Knife was guarded a Thumbs breadth, looking like a common Lannet, which was not laid above the length of the first Joint of the Finger. First, He cut the Skin, and then making an Incision thro' the Fat and the Muscles, he applied his Itinerary; after which he penetrated the Neck of the Bladder, then putting in the Penknife to the Wound, holding it strongly with his Hand he deliver'd it to me, but in the mean Time snatch'd up his *Forceps* and drawing out his Penknife, he thrust it in betwixt the Itinerary and Conductor, dilating the Lips of the Wound by those Two said Instruments, by which means he happily drew

drew out the Stone, when it was extracted, it was the Size of a little Hens Egge, moisten'd with Blood, and on one side surrounded with a small little Membrane, where perhaps it had an Adhesion to the side of the Bladder: It was almost of a round Figure, and uneven like a large sand or gretty Stone. Cleansing the Wound with a Sponge, he applied nothing but a little Lint, and so binding up the Patient he put him to Bed, placing under his Buttocks some Oatmeal to receive the Urine, that wou'd run from the Wound and Fæces upon Occasion. He order'd the Curtains of the Bed to be drawn close, that the Light might not disturb the Patients rest, to compose whom he order'd an Anodine Emulsion to be drunk, *ad libitum*. After the Operation, and the Sick being just laid on the Bed, he cried out of exquisite Pains in the *Glans* of the Yard, when the Stone was taken away, which happens by consent; in all which the Membrane of the *Urethra* has with the inward Membrane of the Bladder.

On the Seventh of March, I saw another *Lithotomy* or Operation for

the Stone perform'd by my Master on a Jewish Boy of Seven Years Old, in which beside what I have already told you, nothing particular happen'd, except the falling down of the *Intestinum Rectum*, occasion'd by the Crys of the Patient, which lubricating with Oil, he put up again with his Finger, lest it shou'd hinder him in his Operation.

A Paracentesis or A-pe-
tura of the Scro-tum. The 21st of Feb. A Boy of Eight Years Old labouring under an *Hydrocele* was brought to Mr. Raw, who making a Perforation by an Instrument call'd a *Trocar* into the *Scrotum*, freed him in Half an Hours Time by letting out the Water. In this Operation these Things are to be observ'd. 1st. That we touch not the Veins in this Perforation. 2^{ly}. That the Needle or Point of the Instrument be applied to the Transparent Place, and that you pierce no deeper than you find it clear. 3^{ly}. After the Operation is over, that you apply a Plaister of *Cummin*, or the like over the whole Cod. Also it is to be noted, that in an *Hydrocele*, the *Vasa Preparantia* and *Deferentia* may be distinguish'd by the Fingers; In the *Hernia* the contrary,

for

for they seem to be confus'd by the falling of the Guts. Which may serve for a Diagnostick Sign, whereby to know the present Condition of any Patient.

The 22d of Feb. Mr. Raw visited a Mechanick, who knew nicely how to make the best Anatomical and Chyrurgical Instruments. He labour'd under a *Caries* of the Shin-bone in the upper Part, in which Place Mr. Raw made an Incision, and directed his Knife to the very Bone, having made the Incision, he separated the proud Luxuriant Flesh from the Lips of the Wound, which he dilated, that there might be more room for applying the Cautery. The Bone being infected with the *Caries*, the carious Fibres of the Muscles were eat away in the carious Part, and cou'd never be brought upon the Bone again, till the *Caries* was taken away. At last the Cauterries were applied, that the Vessels which supplied the *Caries* upon the Bone might be extirpated, which being done, the carious Part separated for a Time, and at last healed ; for the *Carious* Part of the Bone being taken away, the carious Fibres happily grew again,

and at length consolidated with the Bone.

Cutting of a Hair Lip. There was an Infant of Six Months Old, whose Face was deform'd with a double Hair-Lip. Which the Manual Operator separated with his Knife from the Gums of the upper Jaw-bone, to which they were tied ; this being done, there were Three Silver Needles prepared, one Three Corner'd, another Round, and a Third Broad of Three Fingers length, with the first they sew up the gaping Fissure of the Lip, the second Needle is put thro' the lower Part of the Fissure, binding close the Lips of the Wound as the former does, but the third Needle is applied in the middle Part of the Fissure. These being accurately us'd to the Part by help of the *Forceps*, in the last Place, a Plaister is to be put upon the Two Extremities of the wounded Part : And after the Operation, a comfortable Draught is to be given to the Infant.

Amputation of Members.

In the Amputation of the Foot, the Extremity of it ought to be plac'd higher

higher than the upper Part, that it may hinder the Blood from rushing too forcibly on the Part cut: Then it may be stopt by Application of the Chyrurgical Instrument call'd the *Taarniquet*, so that a Spoonful of Blood shall not be lost. The *Amputation* being perform'd in a fleshy Part is sooner done than in a Bony, where the Saw is forc'd to be us'd, otherwise the Bone might be much easier broken. When the Work is over, you must not bind the Part up with Oils or Plaisters, nor tie up the Arteries by the *Forceps*, but 'tis sufficient to apply Astringent Powders with a Bladder, and fence'd with Plaisters. But take Care you use no *Vitriolick Astringentis*: Neither make your Ligature too strong in Children and lean People, for fear of a Gangreen, but in grosser Bodies it may be stricter made.

Such Excrencencies are the best taken off, by a Ligature, which is done with a strong Piece of Silk, wrap'd round the Excrencence, and tied hard with a piece of Lead or Iron at the end of it: So it will fall off in Three or Four Days; the light Inflammation that may arise

from the Ligature, is not to be regard'd. This Operation was done by Mr. Boecklemann, the 16th of Dec. 1706. in a Woman of Eighty Years of Age with extraordinary Success.

of a Scirrhus and Cancer of the Breast. Mr. Bidloo of Leyden was call'd to a Woman at Amsterdam, labouring under a *Scirrhus* of her right Breast:

But his Opinion was, that this *Scirrhus* was a *Cancer*, and therefore prepar'd to Cut it off; but Mr. Ruysch being call'd to Consult with him before the Operation, affirm'd it was no *Cancer*, but only a *Scirrhus*, and applying a Plaster of *Cummin* to it, in Four Days dispers'd the Tumour, and made a happy Cure of it. In a true *Cancer* the matter either lies hid, or is exulcerated, and Mr. Ruysch thinks it the best Method not to irritate it, much less apply hot discussing Medicaments to excite the Acrimony: The safest Medicines are the cooling, as the Emplaister of Frogs with *Mercury*, or Plates of *Lead* dipt in *Quick-Silver*.

of Wounds of the Belly, with the falling down of the Guts. Before all Things, the falling down of the Guts are to be restor'd or put up with the Fingers, or a certain oblique round Instrument, they may be thrust

thrust up by Error betwixt the *Peritoneum*, and the Muscles of the *Abdomen*, which often happens; for the *Peritoneum* is much easier divided from the Muscles of the Belly in live Persons, than in dead Bodies: So that if the Guts, as said before, be thrust betwixt the Muscles and the *Peritoneum* it is Mortal, for a Gangrene presently follows: The same Thing happens when the Guts being down, are too much handled and squeez'd.

These Bones are restor'd by Means of an Iron or Wood Instrument, ^{A Fracture of the Bones of the Nose.} form'd so that it can answer to the inside of the Nose: This being cautiously put up by Degrees into the Nostrils, raises up the depress'd Bones: Outwardly it ought to be assisted by the Hand, till what is wanting be perfectly restored. This being done, one or two little Pipes as necessity requires, ought to be put up the Nostrils, which Pipes shou'd be made with Two Auricles perforated, thro' whose Holes a string being put might be tied above. Outwardly apply a Defensative Plaster of *Vigo*, which may be tied to the Part by the Neck.

From

From the Hospital I shall descend into the Garden, of which there is none in Europe that abounds more with Exotick and rare Plants than this of *Amsterdam*. Of whose Situation, Culture and Magnitude which is middling, I shall say nothing: But take Notice of some few Plants, which in my Time were esteem'd as Rarities.

*Botanick
Curiosities.*

Kali is a Plant that diffuses its Leaves very broad, of about a Foot and Half high, of the thicknes and colour of *Porcelane*. This is that Plant which was brought formerly from *Egypt*, and is now planted in the South-West Part of *France* near *Montpellier*, in the Province of *Narbonne*. By burning of it, that Salt is prepared which is the most excellent for making of Fine Glass. Among all the Cuts of this Plant which the *Botanists* show, none agrees with the Life, so much as that of *Sobelius*; which is found in his *Antwerp* Edition, Page 479.

Mandragora or *Mandrake*, which I have described at large before, is found in this Garden.

Terebinthus, or the *Turpentine Tree*, has a few extended Branches with an Ash-colour'd Bark, with the Leaves join'd

join'd together like the *Sorb* or *Quic-en-Tree*; instead of Flowers before the Leaves Spring from the Tuberles of the Branches, Buds thrust themselves forward in a long Train, adorn'd with Purple Tops.

Cassia Fistula, or *Cassia* in the *Cane*, is a Tree like that of the *Walnut* in Bark and Leaf.

Orleana or *Urucu* of *Braſil* is a Shrub, with Leaves almost like the Black *Poplar*, the Flowers blue after *Autumne*, and are fine Leav'd, partly white and partly flesh-colour'd.

The *Euphorbium Verum* is likewise a great Curiosity.

Arbor Camphorifera, or the Tree that bears *Camphore*, there is a neat Species of this Tree to be seen at *Dresden* in the curious Gardens of Mr. *Heigius*, who is a generous Nurſer of the Pleasures of a Garden, and Exotick Plants.

Ciftus Ledon, is a Fruit Tree with abundance of Woody Branches with oblong Leaves, on the upper Part of a dark Green on the lower a whitish Colour, endowed with a sweet fragrant Odour. They Flower as a large white Rose: The Rose of this Tree is known

known in our Apothecaries Shops by the Name of *Ladanum*.

Styrax, which is a *Virginia Tree*; was call'd by *Ray*, *Platanus Virginiana*, the *Virginia Plane Tree* yielding *Styrax*.

Arbor Benzonifera, or the *Benjamin Tree*, is a *Virginia Tree*, with a brown Bark, strong flourishing Branches, emulating those of the *Lemon* or *Citron*, but softer to the touch, of a finer Substance, and the Leaves at both ends straiter and more mucronated. When rub'd in the Hand of an unpleasant Odour, and they Flower in the Month of *February*.

Sebestena Domestica, an *Affyrian Plumb*, 'tis a Tree of five Foot high with a brown Bark, it is well known to the Physicians and Perfumers, and commended in Diseases of the Breast: But this Shrub is produc'd from the Stones of the Fruit. These are the Plants, which are of the greatest choice of all the Countries of *Affyria*.

There were several others at that Time very curious Exoticks, which either were not in Flower, or by reason of their tenderness, wou'd not admit of a Description; as the *Aristolo-chia*

bia longa offic. Cuminum Verum. *Fe-
ula Galbanifera Anchusa, floribus puni-
eis. Cassia Lignea Indigo. Indigo and
Glastum vel *Isalis Thuringorum* ; but it
is observable our *Glastum* is an Annual
Plant with a Regular Flower, and ob-
long Fruit in a Cod.*

The *Gum Anima*, whose Description
you'll meet with in *Piso's Natural
History*, Book the 4th. Chap. 9th. *Ve-
nilla* or *Venella*'s us'd by the *Druggists*
to make the best Chocolate with *Cacao*,
or Chocolate Nut. The Newest De-
scription of this Exotick Plant, you
will find in the famous *Plumerius* of
his *American Plants*. *Sesamum Verum*.
Bombax Frutesc. The *Bombax* in
Horto Malabarico, or *Malabar Garden*
is call'd *Panja*, or *Panjala*, Tom. 3.
59. It has broad Leaves like the *Wi-
thie*, and bears a single Leav'd regular
Yellow Flower. Besides these are the
Balanus Myrepica, *Lentiscus Echo*,
Thymelea foliis Lini, or with Line Tree
Leaves, whose Granes are call'd *Gni-
dia* by the Perfumers. *Sanguis Draco-
nis*, or *Dragons Blood*. This Plant,
they tell us was sent in the Seed hi-
ther, from *Carthage* in *Peru*.

Next is *Curcumæ* or *Turmeric*, *Cardamomum Minus*, the lesser *Cardamomum*, *Guajacum*, or *Poxwood*, *Zingiber* or *Ginger*, *Senna Alexandr.* or *Alexandrinæ*, *an Senna*, *Scammonium* *Offic.* *C. B.* *Libra* *Pinac.* or *Scammony* of *Caspar Bauhin* *Personæ*, *Arundo Saccharifera*, or, the *Sugar Reed* or *Cane*. These were the Things worthscarerthy my Observation at *Amsterdam*, so and the encrease of our Art, which they call'd have taken such peculiar care about, I shall say nothing further of this celeb'reated City which is the *Emporium* of *Europe*, and which has been so well describ'd by Travellers and Strangers of all Nations; but being intent about my particular Studies abundance of Curiosities escap'd my Observation, and was slipt out of my Memory.

An Account of Cologne. The latter end of April, 1707.

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bid adieu to *Holland*, in order to return into my own Country by the way of *Cologn*; partly, because it is tedious to return the same way one has trac'd before, and partly, because I had a Mind to see the *Jesuits* Colledge at *Cologne*, and visit the Library there. After Eight Days I arriv'd at *Cologne*, and having seen the said Library more than once, I cannot forbear commen-

Concerning the Humanity of the Reverend Fathers to Foreigners, in every Thing that was obliging, and in their Power to let you know relating towards their Library. I was recommended by a Person of Quality, and a great Patron of the Muses, to enquire for a Scarce Book, that was formerly found and seen in this Library of the Jesuits, they call'd *Asuerii Icones Virorum Illustrium*, or *Asuerius Prints of Illustrious Men*, who beside the Philosophers, makes Notice first of all of those call'd Adepts, with an Account of their Lives, and those Things contain'd in their Doctrines. I sought diligently in this famous Library to find out the Book, I was so much in search for, but to no Purpose; for the Library Keeper assur'd me, he had never seen any such Thing, and tho' he had search'd the Catalogue, as well of Manuscripts as Printed Books, he cou'd find no foot-steps of any such Piece. Here is a great Collection, as well of Modern as Ancient Books, which agrees well with the Magnificence of the Adjacent Church and Colledge, for the Jesuits Church is the neatest of all in Cologne, that which is remarkable of the Cathedral

dral, is the Burying-place of the Three Kings, call'd the *Magi* or Wise Men that came out of the *East* to see our Saviour, which is the most celebrated Story in the whole World: This in Neatness and Magnificence is much inferior to the former, yet it is a Building of immense Labour, but not half finished, except the *Choir*, but the whole Edifice is a vast ruin, rather of *Gothick* Architecture, than a well built Church. Of the other Churches and Chappels of this City, whose number as 'tis commonly reported is near Three Hundred, the most remarkable are St. *Gereon's* and St. *Ursula's*, the last of which is believ'd to contain the Reliques of Eleven Thousand Martyrs. There is another Colledge and Church of Holy Virgins at *Cologne*, Dedicated to the Holy Virgin *Mary*, in which I have seen and heard Virgins of the noblest Families in *Cologne* perform Divine Service, and daily sing like Canons, in a particular and ridiculous kind of Habit.

The *Carthusians* Colledge in this Ancient City of *Germany* is very deserving of your Sight, which was considerably adorn'd and augmented of late

by

by the most High and Eminent Duke of *Saxony*, and Cardinal of the Family of *Citz*, for this Colledge before all the Convents of *Cologne* was dear to this Illustrious Prince; since he frequently visited it as the pleasantest and sweetest Retirement, and some Times not without hazard of his Life; when the *French Parties* in the late War were always lying in wait to seise him, in his Way or Rode that lead from his Palace to the *Carthusian* Convent, as the Account of those Times makes appear. The Prior or General of the *Carthusian* Order, gave to this Monastery lately the Reliques of St. *Bruno*, taken up with his own Hand, which *Depositum* is esteem'd the more by these Monks, because *Bruno* was formerly a Citizen of *Cologne*, as the History of their Order shows.

From *Cologne* I went to *Frankfort*, where I was civilly received by Mr. *Heister*, with whose Son I cohabited at *Amsterdam*, and was Hospitably entertain'd during the Fair Time: Here I frequently kept Company with the Physicians and Apothecaries of the

of the Phi-
losophers
Stone.

K City,

City; but particularly with Mr. *Nicholas Saltzwedelius* the Apothecary, who was a Person of great Humanity, and had a very useful Dispensary, which I often visited: Here he shew'd me a small piece of Gold, which he had lately seen transmuted from *Lead*. He told me the said Artful Adept, who was the Author of this Transmutation, now liv'd in *Westphalia*, not far from a Monastery in a certain Village there, with whom he assured me, he had frequent Commerce by Letters concerning Chymical Matters. Of his Manner of Transmutation, of which he was not only an Eye-witness, but experimented it himself; he told me the following Things. This Chymist, who addicted himself to the Art of *Pharmacy*, had a Liquid Tincture of a brown Colour, almost of the smell of Oyl or Spirit of *Hartsborn*, by the Assistance of which, pouring in only four Drops he transmuted a Dram of *Lead* into pure Gold, weighing 23 Carrats, and 7 Grains and a half, containing a whole Mark. He pour'd out his Drops upon the *Lead* being first just melted by the

the Fire. This Fact was done in the House of Mr. *Salzwedelins* in the Month of *May 1702*. In Memory of which he left to his Guest some few Drops of the said Tincture, with which afterwards he happily perform'd the Projection, keeping the little Portion of the Chymical Gold, he had made in perpetual remembrance of the Thing: Some dark remains of the brown Liquor with its fwell were left in the Glass, are yet to be referr'd to, and seen at *Frankfort* to this Day. Whether this Chymist is to be reckon'd among the true Possessors of the Golden Art, or whether it is to be doubted, that his Transmutation was not just, since the weight of his shou'd have been *24 Carrats*: All the Chymists with one Consent agreeing, that the weight of Adept Gold ought to exceed that of the Natural. The Condition of this Divine Art ought to be lamented, that such a number of Impostors, vile vagrant Fellows should eclipse the splendour of their Light, while they vainly attempt to impose their ridiculous Mice upon us for Golden Mountains,

tains, and discover their Artifices to the most ingenious Men, which gives an Occasion to those sort of Men to despise and speak slightingly of the whole Fry of Adepts, calling 'em cheating Atheistical, Scurrilous Lead Fellows. And the Death of *Bragadinus* made it appear, formerly there were such Impostors, for after he had impos'd on the Senate of *Venice*, he was publickly hang'd by the most Serene Duke of *Bavaria*. And lately he that was call'd Count *Cajetan* in our Memories was serv'd so, upon the like Account by the Command of the most powerful King of *Prussia*.

Of the rest, as it appears to me, I must ingenuously Confess, there are sufficient Examples enough worthy of Credit, where without all Imposture or Fraud by means of the Tincture, *Lead* or *Mercury* has been converted into the best Gold. Neither does there remain any Scruple or Question, whether I can be certain of the genuine Operation of Projection or Transmutation. This Tincture is the Soul of Gold, extracted from that Noble Metal

Metal by a singular and secret Artifice, hence not sufficient to perform any Work without being ting'd with a determinate Quantity: Which Divine Work was known formerly to the Monks, which inhabited the Eastern Parts of the World, as some Historical Writers of the Transmutation of Metals do assert. But notwithstanding, what quantity of Gold cou'd be expected from this Artifice, will any Person of a thinking Head suppose he cou'd obtain, unless by chance he had the secret Process of Augmentation to assist him, by which the said Quintessence or Soul of Gold might be so exalted, that one Part thereof wou'd Transmute 16470 Parts of Mercury, as *Swelffer* attests in his *Mantiss. Spagirica*, P. 1. Ch. 1. Page 328. here while I make mention of *Swelffer*, I cannot forbear but from the same Author alledge what is worth your Knowledge, from a Chymist of known Integrity and Skill, which Story he affirms in Testimony of the Truth of making Gold from *Cornelius Martinus* of *Antwerp*, who when he was disputing in the University of *Juliers* against the Philosophers

Stone, and deny'd it with many Arguments, a certain Nobleman there present, commanded some Coals and Lead to be brought to him, and in the Presence of *Cornelius* and several others, casting a certain Tincture into the flowing Metal, by Virtue of the same he Transmuted the melted Lead into Gold, and cry'd out *Gold*, at the same Time reaching it out to show *Cornelius*, he said, *Solve mihi hunc Syllogismum*, Unfold me this Syllogism or Argument. See *Swelfer's Mantiss. Spagyric.* as before: And the same Author brings that upon the Stage, concerning the Chymical Gold which was made at *Prague*, An. 1648, in the Presence of the Emperor *Ferdinand* the 3d. which was thus. In the Presence of his Sacred Majesty, he reduc'd *Mercury* into *Gold*, with one Grain of Powder only; he was a Nobleman, whose Name was *Rich. Thansen*, whom his Sacred Majesty rais'd to a Baron, by the Name and Title of *Lord of Chaos*. From this Transmuted Gold, his Majesty commanded Gold Medals to be struck, with particular Inscriptions on both sides.

sides. On one side, the Face of a Naked Young Man, having the Rays of the Sun on his Head, in his Right Hand holding up *Apollo's Lyre*, in his Left Hand pointing downward to *Mercury's Caducens*, with this Inscription, *Divina Metamorphosis exhibita* *Prage, 15. Januar. 1648.* *In Praes.* *S. Cæs. Maj. Ferdinandi III.* The Divine Transmutation shown at *Prague* the Fifteenth of *January 1648.* in the Presence of his Sacred Majesty *Ferdinand the 3d.* On the other side of the Coin was this. *Raris hæc ut Hominibus nota est Ars, ita rare in Lucem prodit: Laudetur Deus in Eternum,* *qui partem Infinitæ suæ Scientiæ Abjetissimis suis Creaturis communicat.* It is rare that this Art is known to Men, more rare that it is practic'd or shown to the World. God be prais'd for ever, who has communicated part of his Infinite Knowledge to the meanest of his Creatures. This Coin after it had been kept in the Secret Cabinet of the Emperor, was found by his Sacred Majesty *Leopold*, and from his Clemency given to *Swelffer* to have it cut in Brass. From these lit-

tle Stories, and many others I cou'd produce, it is out of all doubt the matter of Fact is true, and that all these Things cou'd never be devised, to impose on the Lovers and Searchers after Truth. But what Swelffer has instanced in, only seems to be of sufficient Force to gain my Assent, and Belief of the whole Matter. In the mean Time, as it is in the Mouths of many prudent Men. *Alchymy* is a Chast Whore who invites many, but admits few Lovers; or, as the Art is bitterly reproach'd. *Alchymia est Ars fine Arte, subjectum ejus est Pars cum Parte, proprium mentiri, & ultimum mendicatum Ire.* *Alchymy* is an Art, without Art, its Subject is a Part with a Part, the Property of it is to Lye, and at last to go a Begging.

Here, my faithful Friend, I have communicated every Thing to you, I thought worth my Notice in my Travels, as well in *England* as *Holland*. It may be some Things here, tho' perhaps not so useful may be acceptable to you, because I offer this as a publick Testimony of our old Ac-

Acquaintance and Friendship formerly contracted in the University, and which has been maintain'd hitherto by a mutual Correspondence of Letters. You will find in this no gloss or colouring put upon the Facts I relate, which I take to be a Vice, we ought to shun in this kind of way of Writing: I car'd not much to wander out of the Sphere of my Art and Profession, which I always make the Standard of my Studies, which if every one that Travels wou'd pursue, it wou'd be of no small Advantage to the Publick: For if Men of Professions, when they visit Foreign Countries, wou'd confine their Observations to their Knowledge, they might make considerable Improvements to their several Faculties, and leave the rest to other Persons.

Here while I was finishing and putting my last Hand to it, before it went to the Press, a Messenger came to me, with the Command of my Clement Lord and Master the most Potent King of Poland, Elector of Saxony, &c. to accept of Physician in Ordinary.

Ordinary to the Household, and im-
mediately to prepare for Poland.

You will wonder my Dear Friend, at this unexpected Change of my Affairs: But I must ingenuously Confess, for these Three Years, and now just after my return from *England* and *Holland*, I had pitch'd upon *Dresden* my Dear Country for my Residence; neither did I think of any Thing else: For Divine Providence has hi-
thereto favour'd my Undertakings, so that in a short space of Time I have enreas'd my Practice, and proceeded with the best Success. But while all these Things were succeeding so pro-
perously, and nothing was further from my Expectation than a Change; it has pleas'd Providence to dispose other-
ways of my Manner of Living, and command me to forsake that happy Prospect of my Practice in my own Country. You may easily then ima-
gine with what Struggle and Contest within my self or what repugnance, as my Affairs now stand, I do this Thing. For it is a hard Matter, and must show the Index of an unstable Temper.

Temper, to alter or change ones a-
pode, to neglect ones Fortune just
happily establish'd, and to exchange
or pass from a quiet Sedate Way of
Living, to a turbulent, dangerous and
uncertain kind of Life. But there are
Two Particular Things, which will
oblige me to surmount all these Diffi-
culties with little Trouble: The first
is, That in my own Busines, I shall
avoid all the little Stratagems and De-
ceits, us'd to bring Men into Pra-
ctice: The other is, That I have had
a silent, but strong Desire in me a
long Time to approve my obedient
Services to the King, my most graci-
ous Lord: For his Majesty has such
powerful ways of conquering the
Hearts, and reconciling the Minds of
all Men to him, that he inspires a
Veneration not only in his Subjects,
but in his very Enemies, unless they
be divested of all Humanity; which
Divine Virtue of the King, and sin-
gular Propensity of his gracious Dis-
position towards all Arts and Scien-
ces, while I was in Foreign Coun-
tries was continually extoll'd and com-
mended by the best of Men; what
shall

shall I add more, than that we see but Subjects, and all his People express their Love and Esteem to this Prince, by their Submissive Devotion. In my Passage to Poland, I hope to enjoy my Friends Company and Conversation, which it has been my hard fate to want this Ten Years; in the mean Time Farewell, and accept in good Part, what was chiefly writ for your sake. The Specimen of Mr. Raw Splagnology so often mention'd in these Sheets, you may expect by the next,

FINNIS.